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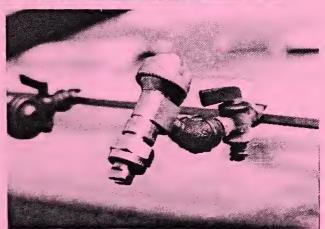
Forest Service

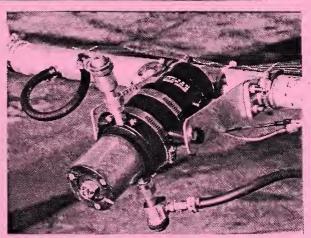
Forest Pest Management

Davis, CA

FINAL REPORT COMPENDIUM OF DROP SIZE SPECTRA COMPILED FROM WIND TUNNEL TESTS







FPM 90-9 August 1991

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Pesticides used improperly can be injurious to human beings, animals, and plants. Follow the directions and heed all precautions on labels. Store pesticides in original containers under lock and key—out of the reach of children and animals—and away from food and feed.

Apply pesticides so that they do not endanger humans, livestock, crops, beneficial insects, fish, and wildlife. Do not apply pesticides where there is danger of drift when honey bees or other pollinating insects are visiting plants, or in ways that may contaminate water or leave illegal residues.

Avoid prolonged inhalation of pesticide sprays or dusts; wear protective clothing and equipment, if specified on the label.

If your hands become contaminated with a pesticide, do not eat or drink until you have washed. In case a pesticide is swallowed or gets in the eyes, follow the first aid treatment given on the label, and get prompt medical attention. If a pesticide is spilled on your skin or clothing, remove clothing immediately and wash skin thoroughly.

NOTE: Some States have restrictions on the use of certain pesticides. Check your State and local regulations. Also, because registrations of pesticides are under constant review by the U.S Environmental Protection Agency, consult your local forest pathologist, county agriculture agent, or State extension specialist to be sure the intended use is still registered.

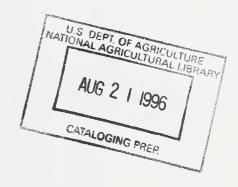


FPM 90-9 August 1991

FINAL REPORT COMPENDIUM OF DROP SIZE
SPECTRA COMPILED FROM
WIND TUNNEL TESTS

Compiled by:

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Introduction

The USDA Forest Service (FS) has been sponsoring, through the University of California, Davis (UCD), evaluation of spray nozzles and pesticide tank mixes. For the past decade Professors Wes Yates and Norm Akesson, and more recently Assistant Professor Bill Steinke, have established methods and conducted tests to measure the size and estimate the number of drops atomized under controlled conditions in a wind tunnel. Much of this work has been for the FS; however, others in the public and private sector have either sponsored their own tests, or when applicable, used FS wind tunnel data sets. Wind tunnel facilities for testing pesticide sprays have also been established and maintained at Cranfield Institute of Technology, England; University of New Brunswick, Canada, USDA Agricultural Research Service, College Station, Texas; and New Mexico State University, Las Cruces, New Mexico. Recently Spray Search of Food Research Institute, Victoria, Australia announced establishment of a wind tunnel facility.

Wind tunnel tests of pesticide and simulant tank mixes are conducted to:

- . Determine the atomization of tank mixes as influenced by hydraulic pressure, flow rate, air velocity, shear across the atomizer, components including adjuvants (chemical, physical, and biological) of the tank mix, viscosity, specific gravity, surface tension, and other atmospheric conditions;
- . Evaluate the mixing and handling of the tank mix; and
- . Develop recommendations for field use of the tank mix.

Atomization results are used in selecting the optimum combination of factors that have a high probability of meeting field project objectives. In other words what tank mix, nozzle, pressure, flow rate, etc. is best to control a specific insect on a specific target?

To assist further in this process of determining the optimum combination of parameters, spray and deposition dispersion models such as FSCBG and AGDISP can be used. One of the most important inputs to these models is the atomization data, obtained through wind tunnel tests.

Facilities to conduct wind tunnel tests include:

- . Wind tunnel of sufficient diameter to allow horizontal expansion of the spray plume and of sufficient length and design to minimize turbulent air flow:
- . Instrumentation such as a laser to measure and count particles;
- . Mechanical system for air flows up to 150 mph;
- . Devices to position, hold, and move the atomizers;
- . Exhaust system to collect exhausting spray; and
- . Pressure and metering system to transport the spray to and through the atomizer.



Generic results as opposed to specific product results from wind tunnel tests indicate that:

- . Shear across hydraulic nozzles caused by nozzle orientation and shear across the rotating cages, or gauze of rotary nozzles are major factors in breakup that produces small drops;
- . Increase in surface tension increases drop size;
- . Viscosity is a minor influence on atomization;
- . Rotary atomizers can be overloaded resulting in larger drop size atomization; this can occur even when the RPM is maintained;
- . Most nozzles produce a large number of small (<56 micron) drops; however, these sizes, aggregately, generally represent less than 1.0% of the total mass; and
- . Slight changes in some chemical, physical, and biological properties of a tank mix can significantly alter the atomization.

The need for wind tunnel evaluation of tank mixes and spray devices will increase as new formulations of biological and other more environmentally acceptable pesticides are developed. Production and application costs will dictate need to significantly improve application efficiency with both current and innovative equipment. Low volumes (5-20 ounces per acre) require highly efficient atomization. Thus, there will be high demand to characterize particulate sprays in wind tunnels. Precise atomization data also will be required for computer model predicting.

Wind tunnel tests are costly and we foresee atomization models being developed to supplement wind tunnel tests. The models will enhance but not replace the need to characterize tank mixes and spray systems. Precise characterization of nozzles is most difficult in uncontrolled conditions associated with outdoor testing. Thus, it is important to support the enhancement of wind tunnel atomization technology and methods of calibrating wind tunnel testing systems.



Nozzle	AIRBI	Slice Rate	1 MHz
Angle to Airstream	0 degrees	AVG	100
Spray Pressure	15 psi	DFM	1 cm.
Airspeed	60 mph	BAR	1.5
Flow Rate	.67 gpm	Distance to Probe	50 cm.
Tank Mix	Foray 48B Undiluted	Sample Interval	1 sec.
RPM	10000	Number of Samples	60
FILE: C:\PMS\DATA\C	4239000.000	Number of Sample	Rings 7

UPPER						ACCU	MULATED	
LIMIT %'!	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.	
/• ·			-					
56	672	1.72E+06	0.06	12.37	0.30	12.37	0.30	
89	4853	2.61E+06	0.52	18.78	2.75	31.15	3.05	
122	7792	3.67E+06	2.23	26.37	11.80	57.52	14.86	
154	7686	3.31E+06	4.52	23.76	23.97	81.28	38.83	
187	4689	1.31E+06	3.39	9.40	17.94	90.69	56.77	
220	3507	677608	2.96	4.87	15.71	95.56	72.48	
252	2345	394824	2.69	2.84	14.26	98.40	86.73	
284	1100	170748	1.72	1.23	9.09	99.62	95.82	
318	297	46112	0.66	0.33	3.51	99.96	99.33	
351	34	5367	0.10	0.04	0.56	100.00	99.89	
382	1	240	0.01	0.00	0.03	100.00	99.92	
414	2	452	0.01	0.00	0.08	100.00	100.00	
TOTAL	3.30E+04	1.39E+07	18.87					

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 32978/ 46412.33 = 71.1%

```
NUMBER MEAN DIA.= D_{10}.... 116.01 \mu m VOLUME MEAN DIA.= D_{30}... 137.40 \mu m SAUTER MEAN DIA.= D_{32}... 160.62 \mu m NUMBER MEDIAN DIA.= D_{N.5}... 112.53 \mu m D_{N.9}... 184.89 \mu m VOLUME MEDIAN DIA.=D_{V.5}... 108.36 \mu m D_{V.9}... 263.67 \mu m
```

RELATIVE SPAN= 0.89

No report - data provided by Temple Bowen, Novo Labs.

Nozzle	Beecomist	Slice Rate	2.7MHz
RPM	8900	AVG	20000
Spray Pressure	17.5 psi	DFM	1 cm.
Airspeed	90 mph	BAR	1.5
Flow Rate	1,3 gpm	Distance to Probe	48 cm.
Tank Mix	$\frac{1}{2}$ Water+Dipel+Triton	Sample Interval	60 sec.
	. a 24 oz/100 gal	Number of Samples	1
FILE: C:\PMS\DA	TA\D8188713.000	Number of Sample	Rings 7

UPPER						ACCU	MULATED
LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.
56	4697	2.13E+11	7020.55	54.25	3.22	54.25	3.22
89	5706	6.93E+10	13769.03	17.61	6.31	71.86	9.53
122	3884	4.99E+10	30284.36	12.68	13.89	84.54	23.42
154	3232	3.31E+10	45292.02	8.41	20.77	92.95	44.19
187	2322	1.48E+10	38401.02	3.77	17.61	96.72	61.80
220	1877	7.12E+09	31143.54	1.81	14.28	98.53	76.08
252	1631	3.47E+09	23630.13	0.88	10.84	99.42	86.92
284	1068	1.48E+D9	14856.68	0.38	6.81	99.79	93.73
318	570	5.53E+08	7950.73	0.14	3.65	99.93	97.38
351	211	2.05E+08	4004.62	0.05	1.84	99.98	99.22
382	58	4.96E+07	1266.36	0.01	0.58	100.00	99.80
414	14	9.52E+06	313.49	0.00	0.14	100.00	99.94
447	4	3.06E+06	127.32	0.00	0.06	100.00	100.00
TOTAL	2.53E+04	3.93E+11	2.18E+05				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 25274/ 36579 = 69.1%

NUMBER MEAN DIA.= D10.... 73.09 μ m VOLUME MEAN DIA.= D30.... 101.96 μ m SAUTER MEAN DIA.= D32.... 139.69 μ m

NUMBER MEDIAN DIA.= $D_{N.5}^{D}$... <56 µm $D_{N.5}^{D}$... 143.02 µm

RELATIVE SPAN= 1.07

 $\frac{1}{*}$ Dipel 6L (2 parts water to 1 part Dipel 6L + Triton @ 24 oz/100 gal.)

Reference #15

		8900 RPM	
Nozzle	Beecomist	Slice Rate	2.7MHz
Angle to Airstream	O degrees	AVG	20000
Spray Pressure	18 psi	DFM	1 cm.
Airspeed	90 mph	BAR	1.5
Flow Rate	3 gpm 1/	Distance to Probe	48 cm.
Tank Mix	3 gpm Water+Dipel+Triton 1/2 nz/100 na!	Sample Interval	60 sec.
	a 12 oz/100 gal	Number of Samples	1
FILE: C:\PMS\DATA\D	8188712.000	Number of Sample !	Rings 7

UPPER LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	ACCU % N	MULATED % VOL.
56 89 122 154 187 220 252 284 318 351 382 414	5470 5893 3623 3379 2316 1754 1451 878 408 147 47		7204.17 13024.20 27247.73 48887.85 43613.35 32962.77 27126.01 15691.00 7781.38 3127.74 1035.20 344.66	55.33 16.55 11.34 9.03 4.26 1.90 1.01 0.39 0.14 0.04	3.15 5.70 11.93 21.41 19.10 14.44 11.88 6.87 3.41 1.37 0.45 0.15	55.33 71.88 83.22 92.25 96.50 98.41 99.41 99.81 99.95 99.99 100.00	3.15 8.86 20.79 42.20 61.30 75.74 87.62 94.49 97.90 99.27 99.72 99.87
447 479	3 1	3.63E+06 2.79E+06	151.34 144.39	0.00	0.07	100.00	99.94 100.00
TOTAL	2.54E+04	3.96E+11	2.28F+05				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 25380/ 37262 = 68.1%

NUMBER MEAN DIA.= D10... 73.50 μ m VOLUME MEAN DIA.= D30... 103.33 μ m SAUTER MEAN DIA.= D32... 142.12 μ m

NUMBER MEDIAN DIA.= $D_{N.5}^{D}$... <56 µm $D_{N.5}^{D}$... 146.39 µm

VOLUME MEDIAN DIA.=DV.1... 92.10 μm DV.5... 167.77 μm DV.9... 263.24 μm

RELATIVE SPAN= 1.02

 $\frac{1}{2}$ Dipel 6L (1 part Dipel 6L to 2 parts water + Triton @ 12 oz/100 gal.

Nozzle	Beecomist	Slice Rate	2.7MHz
RPM	8700	AVG	20000
Spray Pressure	18 psi	DFM	1 cm.
Airspeed	90 mph	BAR	1.5
Flow Rate	3 gpm *	Distance to Probe	48 cm.
Tank Mix	Water + Dipel a 2:1	Sample Interval	60 sec.
		Number of Samples	1
FILE: C:\PMS\DATA\C	18178717 000	Number of Sample !	Pinns 7

UPPER						ACCU	MULATED
LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.
56	4993	1.55E+11	5091.57	49.61	2.10	49.61	2.10
89	6401	5.37E+10	10681.82	17.22	4.40	66.83	6.50
122	3864	4.03E+10	24462.04	12.91	10.08	79.75	16.59
154	3109	2.93E+10	40049.77	9.38	16.51	89.13	33.10
187	2627	1.54E+10	39922.71	4.95	16.46	94.07	49.56
220	2421	9.36E+09	40960.02	3.00	16.89	97.07	66.44
252	1983	5.52E+09	37577.61	1.77	15.49	98.84	81.93
284	1417	2.46E+09	24735.40	0.79	10.20	99.63	92.13
318	759	8.27E+08	11891.17	0.27	4.90	99.89	97.03
351	295	2.37E+08	4637.30	0.08	1.91	99.97	98.95
382	104	7.06E+07	1804.13	0.02	0.74	99.99	99.69
414	25	2.10E+07	691.27	0.01	0.28	100.00	99.97
447	4	1.51E+06	62.97	0.00	0.03	100.00	100.00
TOTAL	2.80E+04	3.12E+11	2.43E+05				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 28002/ 39964 = 70.1%

NUMBER MEAN DIA.= D10... 80.66 μ m VOLUME MEAN DIA.= D30... 114.13 μ m SAUTER MEAN DIA.= D32... 156.79 μ m NUMBER MEDIAN DIA = DN.1... 57.02 μ m

VOLUME MEDIAN DIA.= $D_{V.1}$... 100.38 μm $D_{V.5}$... 187.77 μm $D_{V.9}$... 277.90 μm

RELATIVE SPAN= 0.95

*Dipel 6L (2 parts water to 1 part Dipel 6L)

Nozzle	BEECOMIST 360A	Slice Rate	1.5 MHz
RPM	12700	AVG	20000
Spray Pressure	30 psi	DFM	1 cm.
Airspeed	50 mph	BAR	1.5
Flow Rate	.37 gpm	Distance to Probe	25 cm.
Tank Mix	DIPEL 8L (Undiluted)	Sample Interval	60 sec.
		Number of Samples	1
FILE: C:\PMS\DATA\1:	1048512.003	Number of Sample R	Rings 8

UPPER						ACCU	MULATED
LIMIT	N(RAW)	_N\ZEC	Gm/SEC	<u>%_N</u>	%_YOL.	<u>%_N</u>	%_VOL.
56 87 122 154 187 220 252 284 318	13209 15030 13445 17618 11614 5199 822 42	7.96E+07 2.05E+07 7.47E+06 4.38E+06 1.35E+06 352026 45495 2244 178	2.62 4.08 4.53 5.99 3.48 1.54 0.31	69.99 18.06 6.57 3.85 1.18 0.31 0.04 0.00	11.59 18.07 20.08 26.53 15.42 6.82 1.37 0.10	69.99 88.05 94.61 98.46 99.65 99.96 100.00	11.59 29.66 49.75 76.27 91.69 98.51 99.89 99.98
351	1	44	0.00	0.00	0.00	100.00	100.00
ΤΩΤΔΙ	7 7 DF + DA	1 1/5+08	77 58				

TOTAL 7.70E+04 1.14E+08 22.58

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 76982/ 95234 = 80.8%

```
NUMBER MEAN DIA.= D1D.... 55.87 \mum VOLUME MEAN DIA.= D3D.... 72.42 \mum SAUTER MEAN DIA.= D3D.... 94.80 \mum
```

RELATIVE SPAN= 1.07 Extrapolated

DTG 85/03/12 11:09:00

DFM=1.0--3.0 MHz

UPPER			12700 R	PM		ACCU`	MULATED
LIMIT	N(RAW)	NZSEC	qm/SEC	<u>₹ N</u>	% VOL.	₹ _ N	%_VOL.
56	6173	3.12E 07	1.03	60.87	4.93	60.87	4.93
89	8825	6.67E 06	1.33	13.02	6.37	73.88	11.31
122	9814	7.41E 06	4.50	14.46	21.63	88.34	32.94
154	8224	3.58E 06	4.90	6.99	23.55	95.33	56.48
187	6089	1.51E 06	3.90	2.94	13.77	93.27	7 5.25
219	4016	576138	2.52	1.12	12.11	99.39	87.36
252	2366	211439	1.44	0.41	6.93	99.80	94.29
284	1169	73293	0.74	0.14	3.54	99.95	97.32
313	366	19306	0.28	0.04	1.33	99.98	99.16
351	123	6177	0.12	0.01	0.58	100.00	99.74
332	29	1409	0.04	0.00	0.17	100.00	99.91
414	6	448	0.01	0.00	0.07	100.00	99.98
447	2	8 2	0.00	0.00	0.02	100.00	100.00
479	0	0	0.00	0.00	0.00	190.00	100.00
TOTALS		5.13E 07	20.80				

TOTAL RAW PARTICLES.... 47202/50530-- 93.41%

NUMBER MEAN DIAMETER... 67.27 MICROMETERS S.D.... 41.78

VOLUME MEAN DIAMETER... 91.89 MICROMETERS S.D... 122,56

SAUTER MEAN DIAMETER... 123.76 MICROMETERS

 $D_{N0.1}$... 0.00 MICROMETERS $D_{V0.1}$... 82.50 MICROMETERS $D_{V0.5}$... 145.52 MICROMETERS $D_{V0.5}$... 1.03 $D_{V0.9}$... 129.45 MICROMETERS $D_{V0.9}$... 232.03 MICROMETERS

Nozzle	BEECOMIST 360A	Slice Rate	1.5 MHz
RPM	12700	AVG	20000
Spray Pressure	25 psi	DFM	1 cm.
Airspeed	50 mph	BAR	1.5
Flow Rate	.95 gpm	Distance to Probe	25 cm.
Tank Mix	50% DIPEL 8L,50%	Sample Interval	60 sec.
	WATER	Number of Samples	1
FILE: C:\PMS\DATA\1	1078513.003	Number of Sample F	Rings 9

UPPER						ACCU	MULATED
LIMIT	N(RAW)	_N/SEC	Gm/SEC	<u>%_N</u>	%_VOL.	<u>%_N</u>	%_VOL.
56 87 122 154 187 220 252 284 318	17386 18014 19124 13586 10380 5328 970 62	1.34E+08 3.53E+07 2.32E+07 1.02E+07 3.88E+06 1.24E+06 199403 12495	4.40 7.01 14.10 13.90 10.03 5.41 1.36 0.13	64.40 16.97 11.18 4.89 1.87 0.60 0.10	7.81 12.43 25.00 24.65 17.80 9.59 2.41 0.22	64.40 81.37 92.55 97.43 99.30 99.90 99.99 100.00	7.81 20.24 45.24 69.89 87.69 97.28 99.69 99.91
351 TOTAL	4 8.49E+04	1658 2.08F+08	0.03 -56.37	0.00	0.06	100.00	100.00

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 84858/ 110041 = 77.1%

```
NUMBER MEAN DIA.= D10... 61.02 \mum VOLUME MEAN DIA.= D30... 80.36 \mum SAUTER MEAN DIA.= D32... 105.52 \mum
```

RELATIVE SPAN= 1.04

Nozzle	BEECOMIST 360A	Slice Rate	1.5 MHz
RPM	12700	AVG	20000
Spray Pressure	60 psi	DFM	1 cm.
Airspeed	50 mph	BAR	1.5
Flow Rate	.7 gpm	Distance to Probe	25 cm.
Tank Mix	50% DIPEL 8L,50%	Sample Interval	60 sec.
	WATER	Number of Samples	1
FILE: C:\PMS\DATA\1	1048514.003	Number of Sample A	Rings 9

UPPER						ACCU	MULATED
FIWII	N(RAW)	_N/SEC	Gm/SEC	<u>%_N</u>	%_YOL.	<u>%</u> _N	<u>%_YOL.</u>
56 89 122 154 187 220 252 284	17170 17914 20068 15551 10384 3400 187	1.21E+08 3.03E+07 1.84E+07 8.51E+06 2.82E+06 762508 45540 4224	3.99 6.03 11.19 11.65 7.29 3.34 0.31	66.59 16.63 10.12 4.67 1.55 0.42 0.02	9.10 13.74 25.52 26.56 16.63 7.61 0.71	66.59 83.22 93.34 98.01 99.55 99.97 100.00	9.10 22.84 48.36 74.92 91.55 99.15 99.86 99.96
318	3	1307	0.02	0.00	0.04	100.00	100.00
TOTAL	8.47E+04	1.82E+08	43.86				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 84689/ 107183 = 79.0%

```
NUMBER MEAN DIA.= D10.... 59.15 \mum VOLUME MEAN DIA.= D30.... 77.20 \mum SAUTER MEAN DIA.= D32... 100.74 \mum
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NUMBER MEDIAN DIA.=
$$D_{N.5...}^{D_{N.1}...}$$
 <56 μ m $D_{N.9}^{D_{N.5}...}$ 111.05 μ m

RELATIVE SPAN= 1.02

BEECOMIST 360A,70 MPH,.88 GPM,1 PART DIPEL 8L,1 PART WATER

DTG 85/04/30 11:45:00

30 PSI, 12,700 RPM

DFM=1.0--3.0 MHz

UPPER						ACCU	MULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	<u>8 N</u>	% VOL.	<u>₹ </u>	%_VOL.
56	6905	2.29E 08	7.53	67.80	8.72	67.80	8.72
89	8289	4.67E 07	9.27	13.81	10.73	81.61	19.45
122	8539	3.92E 07	23.79	11.60	27.54	93.21	46.99
154	7169	1.59E 07	21.77	4.71	25.20	97.92	72.19
18 7	5240	4.73E 06	12.26	1.40	14.19	99.32	86.38
219	3910	1.73E 06	7.56	0.51	8.75	99.83	95.13
252	2076	466451	3.18	0.14	3.68	99.97	98.81
284	617	82643	0.83	0.02	0.96	100.00	99.77
318	119	12204	0.18	0.00	0.20	100.00	99.97
351	10	1129	0.02	0.00	0.03	100.00	100.00
382	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		3.38E 08	86.39				

TOTAL RAW PARTICLES.... 42874/53741-- 79.78%

NUMBER MEAN DIAMETER... 59.48 MICROMETERS S.D.... 33.92

VOLUME MEAN DIAMETER... 78.78 MICROMETERS S.D.... 104.74

SAUTER MEAN DIAMETER... 104.31 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 60.21 MICROMETERS D_{N0.5} 0.00 MICROMETERS D_{V0.5}··· 125.55 MICROMETERS R.S.... 1.12

D_{N0.9}... 112.81 MICROMETERS D_{V0.9}... 200.60 MICROMETERS

Nozzle	BEECOMIST	Slice Rate	1 MHz
Angle to Airstream	0 degrees	AVG	100
Spray Pressure	15 psi	DFM	1 cm.
Airspeed	60 mph	BAR	1.5
Flow Rate	.67 gpm	Distance to Probe	25 cm.
Tank Mix	Foray 48B Undiluted	Sample Interval	1 sec.
RPM	10000	Number of Samples	60
FILE: C:\PMS\DATA\O	4169014.000	Number of Sample I	Rings 6

UPPER						ACCU	MULATED
LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.
							
56	1688	4.81E+06	0.16	35.27	0.58	35.27	0.58
89	5495	2.06E+06	0.41	15.14	1.51	50.41	2.09
122	4583	1.90E+06	1.16	13.97	4.25	64.38	6.35
154	2683	1.30E+06	1.78	9.52	6.53	73.89	12.88
187	2139	1.26E+06	3.26	9.24	12.00	83.13	24.88
220	1651	1.00E+06	4.39	7.37	16.17	90.50	41.05
252	1048	553922	3.77	4.06	13.89	94.56	54.94
284	739	365232	3.67	2.68	13.50	97.24	68.45
318	388	185300	2.66	1.36	9.81	98.60	78.25
351	197	84830	1.66	0.62	6.11	99.23	84.36
382	108	39253	1.00	0.29	3.69	99.51	88.05
414	90	24537	0.81	0.18	2.97	99.69	91.02
447	63	16280	0.68	0.12	2.50	99.81	93.52
479	39	9945	0.52	0.07	1.90	99.89	95.41
512	32	7138	0.45	0.05	1.67	99.94	97.08
545	16	3813	0.29	0.03	1.08	99.97	98.17
578	12	2423	0.22	0.02	0.82	99.98	98.99
611	6	1218	0.13	0.01	0.49	99.99	99.48
644	2	477	0.06	0.00	0.23	100.00	99.71
677	1	344	0.05	0.00	0.19	100.00	99.90
710	1	161	0.03	0.00	0.10	100.00	100.00
TOTAL	2.10E+04	1.36E+07	27.17				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 20980/ 32925.67 = 63.7%

NUMBER MEAN DIA.= D_{10} ... 109.64 µm VOLUME MEAN DIA.= D_{30} ... 156.20 µm SAUTER MEAN DIA.= D_{32} ... 212.92 µm NUMBER MEDIAN DIA.= $D_{N.1}$... <56 µm $D_{N.5}$... 88.37 µm $D_{N.9}$... 217.66 µm

RELATIVE SPAN = 1.09

VOLUME MEDIAN DIA.=DV.1... 140.05 μ m DV.1... 240.76 μ m DV.9... 403.68 μ m

No report - data provided by Temple Bowen, Novo Labs.

Nozzle	Beecomist	Slice Rate	3 MHz
RPM	10000	AVG	100
Spray Pressure	20 psi	DFM	1 cm.
Airspeed	110 mph	BAR	1.5
Flow Rate	.8 gpm	Distance to Probe	90 cm.
Tank Mix	Foray 48B Undiluted	Sample Interval	1 sec.
		Number of Samples	60
FILE: C:\PMS\DATA\C	4189000.000	Number of Sample !	Rings 5

FILE: C:\PMS\DATA\04189000.000
Blade Angle 0 degrees
Number of Tests Combined: 1

UPPER						ACCU	MULATED
LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.
56	1053	2.19E+07	0.72	35.92	0.50	35.92	0.50
89	2704	6.82E+06	1.36	11.20	0.94	47.12	1.44
122	2973	6.62E+06	4.02	10.89	2.80	58.01	4.24
154	2414	6.73E+06	9.21	11.06	6.41	69.07	10.65
187	1744	6.24E+06	16.14	10.25	11.23	79.32	21.88
220	1299	4.84E+06	21.15	7.95	14.72	87.27	36.61
252	1040	3.28E+06	22.35	5.39	15.56	92.66	52.17
284	831	1.96E+06	19.69	3.22	13.71	95.88	65.87
318	716	1.22E+06	17.57	2.01	12.23	97.89	78.11
351	521	709174	13.87	1.17	9.65	99.06	87.76
382	291	321867	8.22	0.53	5.72	99.59	93.48
414	154	164586	5.42	0.27	3.77	99.86	97.25
447	59	60680	2.53	0.10	1.76	99.96	99.01
479	24	17593	0.91	0.03	0.63	99.99	99.65
512	11	6198	0.39	0.01	0.27	100.00	99.92
545	1	322	0.02	0.00	0.02	100.00	99.94
578	1	152	0.01	0.00	0.01	100.00	99.95
611	1	682	0.07	0.00	0.05	100.00	100.00
TOTAL	1.58E+04	6.08E+07	143.67				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 15835/ 23346.34 = 67.8%

NUMBER MEAN DIA.= D $_{10}$... 117.60 µm VOLUME MEAN DIA.= D $_{30}$... 165.29 µm SAUTER MEAN DIA.= D $_{32}$... 219.69 µm

NUMBER MEDIAN DIA.=D $_{N.5}^{D}\dots$ 97.66 µm D $_{N.9}^{D}\dots$ 236.21 µm

VOLUME MEDIAN DIA.=DV.1... 151.24 μm DV.5... 247.90 μm DV.9... 363.83 μm

RELATIVE SPAN= 0.86

Nozzle	Beecomist	Slice Rate	3 MHz
RPM	10000	AVG	100
Spray Pressure	36 psi	DFM	1 cm.
Airspeed	110 mph	BAR	1.5
Flow Rate	1.6 gpm	Distance to Probe	90 cm.
Tank Mix	Foray 48B Undiluted	Sample Interval	1 sec.
		Number of Samples	60
FILE: C:\PMS\DATA\O	4189000.500	Number of Sample 1	Rings 5

FILE: C:\PMS\DATA\04189000.500 Blade Angle 0 degrees

Number of Tests Combined: 1

UPPER						ACCU	MULATED
LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.
56	1236	2.61E+07	0.86	40.45	0.50	40.45	0.50
89	2842	7.75E+06	1.54	12.00	0.89	52.45	1.39
122	2883	6.56E+06	3.98	10.15	2.30	62.61	3.69
154	2256	5.69E+06	7.79	8.81	4.50	71.41	8.20
187	1706	4.80E+06	12.43	7.44	7.19	78.85	15.39
220	1331	3.89E+06	17.03	6.03	9.85	84.88	25.24
252	1183	3.21E+06	21.87	4.97	12.65	89.85	37.89
284	1053	2.53E+06	25.38	3.91	14.68	93.76	52.57
318	851	1.81E+06	26.06	2.81	15.07	96.56	67.64
351	616	1.15E+06	22.40	1.77	12.96	98.34	80.60
382	340	598888	15.29	0.93	8.85	99.26	89.45
414	189	304295	10.02	0.47	5.80	99.74	95.25
447	81	110416	4.60	0.17	2.66	99.91	97.91
479	28	31481	1.63	0.05	0.94	99.96	98.85
512	12	19145	1.22	0.03	0.70	99.99	99.56
545	3	8232	0.63	0.01	0.37	100.00	99.92
578	2	872	0.08	0.00	0.05	100.00	99.97
611	1	472	0.05	0.00	0.03	100.00	100.00
TOTAL :	1.66E+04	6.46E+07	172.86				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 16614/ 17616.67 = 94.3%

NUMBER MEAN DIA.= D 10 ... 115.51 μ m VOLUME MEAN DIA.= D 30 ... 172.32 μ m SAUTER MEAN DIA.= D 32 ... 239.99 μ m NUMBER MEDIAN DIA.=D N.1 ... <56 μ m D 82.53 μ m D 253.10 μ m

VOLUME MEDIAN DIA.=DV.1... 162.58 µm DV.5... 279.02 µm DV.9... 385.12 µm

RELATIVE SPAN= 0.80

FILE NUMBER: - 151

STATISTICS

Foray Undiluted (BBN 6000)
Beecomist, 110 MPH
6.0 liters/min.
10,000 (24V/7A) RPM
psi - not reported

THE TABLES USE THE FOLLOWING CODE

Number = (0) Length = (1)

Area =(2)

Volume = (3)

PERCENTILES um

% (0) (1) (2) (3) 10.0 16.2 28.3 57.2 94.6 15.9 19.5 36.1 72.1 115.0 25.0 24.6 48.9 91.4 142.0 50.0 43.2 87.1 146.4 220.3 75.0 79.6 143.3 232.6 302.2 84.1 102.2 179.4 275.5 338.8 90.0 127.1 223.7 312.1 375.8

DROPLET SPECTRUM PARAMETERS

NUMBER MEDIAN DIAM 43.2 microns

NUMBER AVERAGE DIAM 61.1 microns

VOLUME AVERAGE DIAM 103.7 microns

SAUTER AVERAGE DIAM 168.7 microns

VOLUME MEDIAN DIAM 220.3 microns

SPECTRUM 'WIDTH' PARAMETERS

 sigma g (0),(3)
 2.22 1.92

 SPAN (ASTM)
 281.12

 RELATIVE SPAN
 1.28

 'R' (VMD/NMD)
 5.10

DROPS/LITRE :- 1.71E+009

TOTAL RAW NO.:- 97399

SAMPLE TIME (secs):- 307

FILE NUMBER :- 151

FREQUENCY AND ACCUMULATED PERCENTAGE DATA

	1	Number	L	ength		Area		Volume
size µm		(0)	(1)		(2)		(3)
size µm 25.5 40.4 55.2 70.1 84.9 99.3 129.2 145.2 158.9 173.4 1883.2 217.5 262.5 277.5 2927.5 337.5 367.5 367.5 3827.5	26.81 9.57 9.57 9.53 3.14 6.39 6.54 4.32 2.11 1.00 0.00 0.00 0.00	(0) 267.562 77.60.2 77.3.4 87.6.2 77.15 88.13.567 88.99999999999999999999999999999999999	7.9210.2866.9130560.76451988543.3221.11000	1) 7.91317323661773049008616813567889 199.1317323661773049008616813567889 9999999999999999999999999999999999	1.3.4.5.7.8.4.8.9.7.6.3.4.1.6.8.5.4.2.7.4.9.1.7.6.5.4.3.3.3.3.2.2.2.1.4.9.1.7.6.5.4.3.2.1.4.5.3.2.1.4.5.3.2.1.4.5.3.2.1.4.5.3.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	2 14.29.81.98.51.48.36.01.75.03.52.65.63.94.81.34 12.95.2.34.45.66.77.88.88.99.99.99.99.99.99.99.99.99.99.99.	.17311030512711544.612228046539863	(3) 181234.7611.4122826135.69771.7244270 2.1231.14.12282.6135.6977.1724455.83.682.56977.1724.44270 888.881.727.0
502.5 517.5 532.5 547.5	.0	100.0 100.0 100.0	.0	99.9 99.9 100.0 100.0	.1 .1 .1	99.5 99.6 99.8 99.8	. 4 . 4 . 2	98.5 98.8 99.2 99.4
562.5 577.5 592.5	.0	100.0 100.0 100.0	.0	100.0	.0	99.8 99.9 100.0	.1 .3 .2	99.4 99.5 99.8 100.0

FILE NUMBER:- 153

STATISTICS

Foray Undiluted (BBN 6000) Beecomist, 110 MPH 3.0 liters/min. 10,000 (24V/7A) RPM psi - not reported

THE TABLES USE THE FOLLOWING CODE

Number =(0)

Length = (1)

Area = (2)

Volume = (3)

PERCENTILES µm

%	(0)	(1)	(2)	(3)
10.0	15.3	25.0	53.5	88.8
15.9	18.0	32.6	68.1	106.9
25.0	22.2	44.7	86.9	131.8
50.0	38.7	82.5	139.1	192.5
75.0	73.8	137.7	208.7	258.2
84.1	96.3	170.6	244.1	286.3
90.0	121.1	205.3	269.2	314.2

DROPLET SPECTRUM PARAMETERS

NUMBER	MEDIAN D	IAM	38.7	microns
NUMBER	AVERAGE	DIAM	56.5	microns
VOLUME	AVERAGE	DIAM	95.3	microns
SAUTER	AVERAGE	DIAM	152.6	microns
VOLUME	MEDIAN D	IAM	192.5	microns

SPECTRUM 'WIDTH' PARAMETERS

sigma g (0),(3)	2.15 1.80
SPAN (ASTM)	225.42
RELATIVE SPAN	1.17
'R' (VMD/NMD)	4.98

DROPS/LITRE :- 2.20E+009

TOTAL RAW NO.:- 65883

SAMPLE TIME (secs):- 412

FILE NUMBER :- 153

FREQUENCY AND ACCUMULATED PERCENTAGE DATA

size µm	N	umber (0)		ength		Area		Volume (3)
25.4 25.4 25.4 25.4 25.4 25.4 26.3 21.4 21.4 21.4 21.5 21.4 21.5	32.3 20.0 12.1 8.9 6.9 5.15 2.7 1.4 1.2 .6 .6 .6 .6 .6 .6 .6 .6 .6 .6 .6 .6 .6	32.3 64.4 73.3 85.3 85.3 85.3 85.3 85.3 85.3 97.7 98.6 99.9 99.9 99.9 99.0 1000.0 1000.0 1000.0 1000.0 1000.0 1000.0 1000.0	10.3 11.7 10.3 9.4 8.3 6.8 5.1 9.3 2.1 1.5 1.7 5.4 3.2 1.1 1.0 0.0 0.0 0.0 0.0	10.3 22.2 151.5 10.3 22.2 151.5 10.3 10.3 10.3 10.3 10.3 10.3 10.3 10.3	1.984.9 77.0009810897.891638.5543.211.0000000000000000000000000000000000	976706777645533C76725316025667789999 1.5.6.7067777645533C76725316025666778999999999999999999999999999999999	2855769639411288319168719763212212 1234456566555565332111 	1.06.18.4.30.2.1.4.5.7.9.7.5.8.8.7.8.5.3.0.1.1.7.3.6.8.9.1.4.5.7.8.9.3.6.4.8.3.8.4.3.8.4.5.8.8.8.8.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9
577.5	. 0	100.0	.0	100.0	.0	100.0	.1	100.0

Spray Mixture, 1 part Thuricide: 2 part Water

BEECOMIST, 65 MPH, 2.5 GPM, 8700 RPM, THURICIDE 32LV, 33% MIX, 28 PSI

DTG 84/06/06 14:30:20

DFM=1.0--2.8 MHz

UPPER						ACCU!	IULATED
TIWI.L	H(RAW)	N/SEC	qm/SCC	<u>8 N</u>	%_VOL.	8 N	%_VOL.
56	2875	2.94E 08	9.68	70.84	5.80	70.84	5.80
89	1615	2.57€ 07	5.11	6.19	3.06	77.03	8.86
122	2520	4.46E 07	27.06	10.72	16.21	87.75	25.07
154	2166	2.87E 07	39.22	6.90	23.50	94.65	48.57
187	2031	1.37E 07	35.61	3.31	21.33	97.96	69.90
219	1690	5.67E 06	24.31	1.37	14.86	99.32	84.76
252 ·	1244	1.67E 06	11.38	0.40	6.82	99.73	91.58
284	860	589659	5.92	0.14	3.55	99.87	95.13
318	371	521692	7.50	0.13	4.49	99.99	99.62
351	99	20972	0.41	0.01	0.25	100.00	99.87
395	25	5611	0.14	0.00	0.09	100.00	99.95
414	13	1744	0.06	0.00	0.03	100.00	99.99
447	1	445	0.02	0.00	0.01	100.00	100.00
479	0	0	0.00	0.00	0.00	100.00	100.00
FOTALS		4.16E 03	166.92				

TOTAL RAW PARTICLES.... 15510/20726-- 74.33%

NUMBER MEAN DIAMETER... 63.56 MICROMETERS S.D.... 43.23

VOLUME MEAN DIAMETER... 91.57 MICROMETERS S.D... 126.43

SAUTER MEAN DIAMETER... 129.95 MICROMETERS

D _{N0.1}	0.00	MICROMETERS	D _{V0.1}	91.25	MICROMETERS		
D,10.5	0.00	MICROMETERS	D _{V0.5}	156.49	MICROMETERS	R.S	0.98
_		MICROMETERS		_	MICROMETERS		

Spray Mixture; 1 part Thuricide: 1 part Water

BEECOMIST, 65 MPH, 2.5 GPM, 8700 RPM, THURICIDE 32LV, 50% MIX, 28 PSI

DTG 84/06/06 10:40:04

DFM=1.0--2.8 MHz

UPPER						A CC UN	MULATED
LIMIT	N (RAW)	NZSEC	qm/SEC	# N	% VOL.	8 N	% VOL.
56	2770	3.19E 08	10.50	73.49	7.05	73.49	7.05
89	1804	2.95E 07	5.86	6.79	3.94	80.27	10.99
122	2769	3.96E 07	24.07	9.12	16.16	89.40	27.15
154	2728	2.67E 07	36.58	6.15	24.56	95.55	51.71
187	2210	1.23E 07	31.80	2.83	21.35	98.38	73.06
219	1765	4.64E 06	20.28	1.07	13.61	99.44	86.67
252	1420	1.64E 06	11.20	0.38	7.52	99.82	94.19
284	903	594357	5.97	0.14	4.01	99.96	98.20
318	476	144960	2.08	0.03	1.40	99.99	99.60
351	156	. 25848	0.51	0.01	0.34	100.00	99.94
382	31	2.779	0.07	0.00	0.05	100.00	99.99
414	6	654	0.02	0.00	0.01	100.00	100.00
447	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		4.35E 08	148.94				

TOTAL RAW PARTICLES.... 17038/21961-- 77.58%

NUMBER MEAN DIAMETER... 60.57 MICRONETERS S.D.... 40.40

VOLUME MEAN DIAMETER... 86.86 MICROMETERS S.D.... 120.55

SAUTER MEAN DIAMETER... 123.65 MICROMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 81.00 MICROMETERS $D_{V0.5}...$ 152.31 MICROMETERS R.S.... 1.00

D_{N0.9}... 124.84 MICROMETERS D_{V0.9}... 234,05 MICROMETERS

Reference #13

Nozzle	BEECOMIST 360A	Slice Rate	1.5 MHz
RPM	12700	AVG	20000
Spray Pressure	30 psi	DFM	1 cm.
Airspeed	50 mph	BAR	1.5
Flow Rate	.47 gpm	Distance to Probe	25 cm.
Tank Mix	THURICIDE 48LV, NEAT	Sample Interval	6D sec.
		Number of Samples	1
FILE: C:\PMS\DATA\D	8288511.003	Number of Sample 6	Rings 9

UPPER						ACCU	MULATED
LIMIT	N(RAW)	_N/SEC	Gm/SEC	<u>%_N</u>	%_YOL.	<u>%_N</u>	%_VOL.
56	20839	1.98E+08	6.50	82.14	26.09	82.14	26.09
89	21130	3.05E+07	6.06	12.66	24.30	94.81	50.39
122	18098	8.23E+D6	5.00	3.42	20.05	98.23	70.44
154	13659	3.26E+D6	4.46	1.36	17.91	99.58	88.35
187	6060	841250	2.18	0.35	8.74	99.93	97.09
220	1584	150823	0.66	0.06	2.65	100.00	99.74
252	90	8250	0.06	0.00	0.23	100.00	99.96
284	6	932	0.01	0.00	0.04	100.00	100.00
TOTAL	8.15E+04	2.41E+08	24.92				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 81466/ 103182 = 79.0%

```
NUMBER MEAN DIA. = D10... 48.04 \mum VOLUME MEAN DIA. = D30... 58.29 \mum SAUTER MEAN DIA. = D30... 72.59 \mum NUMBER MEDIAN DIA. = DN.1... \langle 56 \mum \langle 56
```

Nozzle	BEECOMIST 360A	Slice Rate	1.5 MHz
RPM	12700	AVG	20000
Spray Pressure	25 psi	DFM	1 cm.
Airspeed	50 mph	BAR	1.5
Flow Rate	.95 gpm	Distance to Probe	25 cm.
Tank Mix	50% THURICIDE 48LV	Sample Interval	6D sec.
	50% WATER	Number of Samples	1
FILE: C:\PMS\DATA\1	0108509.003	Number of Sample	Rings 9

UPPER						ACCU	MULATED
LIMIT	N(RAW)	_N/SEC	Gm/SEC	<u>%_N</u>	%_VOL.	<u>%_N</u>	%_VOL.
56 89 122 154 187 220 252 284 318	14920 16882 17328 15222 10155 3555 350 7	2.95E+08 7.07E+07 2.87E+07 9.56E+06 2.53E+06 528836 45466 1196	9.72 14.07 17.45 13.08 6.54 2.31 0.31	72.49 17.36 7.05 2.35 0.62 0.13 0.01	15.31 22.15 27.47 20.61 10.30 3.64 0.49 0.02	72.49 89.84 96.89 99.24 99.86 99.99 100.00	15.31 37.46 64.94 85.54 95.85 99.49 99.98 100.00
TOTAL	7.84E+04	4.08E+08	-3.49	0.00	0.00	100.00	100.00

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 78420/ 108546 = 72.2%

```
NUMBER MEAN DIA. = D10... 53.39 µm VOLUME MEAN DIA. = D30... 66.78 µm SAUTER MEAN DIA. = D32... 84.58 µm NUMBER MEDIAN DIA. = DN.1... (56 µm 656 µm 89.67 µm 89.67 µm VOLUME MEDIAN DIA. = DV.1... (56 µm 89.67 µm DV.5... 104.00 µm DV.9... 168.57 µm
```

RELATIVE SPAN= 1.16 Extrapplated

Nozzle	Beecomist 360A	Slice Rate 2 MHz	:
RPM	9000	AVG 100	
Spray Pressure	23 psi	DFM 1 cm.	
Airspeed	55 mph	BAR 1.5	
Flow Rate	.9 gpm	Distance to Probe 15 cm.	
Tank Mix	TM Biocontrol	Sample Interval 1 sec.	
		Number of Samples 60	
FILE: C:\PMS\DATA\	01319116.000	Number of Sample Rings 7	

Blade Angle 0 degrees

Number of Tests Combined: 3

UPPER		0	0			ACCUMU	LATED
LIMIT	N(RAW)	N/Cm ² S	Gm/M ² S	% N	% VOL.	% N	% VOL.
56	3350	5.22E+07	17159.45	34.56	0.86	34.56	0.86
89	2481	1.95E+07	38775.89	12.92	1.95	47.48	2.81
122	2130	2.10E+07	1.27E+05	13.88	6.39	61.36	9.20
154	2889	2.61E+07	3.57E+05	17.27	17.91	78.63	27.11
187	2874	1.70E+07	4.39E+05	11.24	22.05	89.87	49.16
220	2501	8.35E+06	3.65E+05	5.53	18.33	95.40	67.50
252	2097	4.17E+06	2.84E+05	2.76	14.25	98.16	81.75
284	1400	1.67E+06	1.68E+05	1.11	8.41	99.27	90.16
318	819	696453	1.00E+05	0.46	5.03	99.73	95.19
351	414	262510	51338.96	0.17	2.58	99.90	97.77
382	177	90485	23106.75	0.06	1.16	99.96	98.93
414	73	37578	12371.70	0.02	0.62	99.99	99.55
447	19	10253	4272.52	0.01	0.21	99.99	99.77
479	9	2953	1530.91	0.00	0.08	100.00	99.84
512	4	3397	2159.03	0.00	0.11	100.00	99.95
545	1	1195	919.64	0.00	0.05	100.00	100.00
578	0	52	48.28	0.00	0.00	100.00	100.00
TOTAL 2	2.12E+04	1.51E+08	1.99E+06				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 21236/36997.67 = 57.4%

NUMBER MEAN DIA.= D_{10} ... 103.68 µm VOLUME MEAN DIA.= D_{30} ... 136.13 µm SAUTER MEAN DIA.= D_{32} ... 172.08 µm

NUMBER MEDIAN DIA.=DN.5... 94.94 μm $^{D}_{N.9}...$ 187.66 μm

VOLUME MEDIAN DIA.=DV.1... 123.08 μm DV.5... 188.41 μm DV.9... 284.15 μm

RELATIVE SPAN= 0.85

Nozzle		Beecomi	st 360A	Slice	e Rate	2	MHz
RPM		7600		AVG		0	
-	ressure	34 ps		DFM		1 cm	ι.
Airspee		55 mp		BAR		1.5	
Flow Ra		1.9 g				Probe 15 c	
Tank Mi	x	TM Bioc	ontrol		le Interv		ec.
					er of Sar		_
		4\02059112.		Numbe	er of Sar	mple Rings	5 7
	ngle				•		
Number	or lests (Combined: 3					
UPPER						ACCUM	JLATED
LIMIT	N(RAW)	N/Cm ² s	Gm/M ² S	% N	% VOL.	% N	% VOL.
p^	,		,				
-							
56	3612	4.58E+07	15051.69	28.74	0.28	28.74	0.28
89	2325	1.59E+07	31595.73	9.98	0.59	38.72	0.88
122	1805	1.59E+07	96264.06	9.96	1.81	48.68	2.69
154	1975	2.37E+07	3.24E+05	14.89	6.10	63.56	8.79
187	1661	1.97E+07	5.10E+05	12.39	9.60		
220	1204	1.29E+07	5.65E+05	8.11	10.62	84.06	
252	1093	8.90E+06	6.06E+05	5.59	11.40	89.65	40.41
284	1035	5.61E+06	5.63E+05	3.52	10.60	93.17	51.01
318 .	1005	4.36E+06	6.26E+05	2.74	11.78	95.90	62.79
351	880	2.51E+06	4.91E+05	1.58	9.23	97.48	72.02
382	683	1.65E+06	4.22E+05	1.04	7.94	98.52	79.96
414	461	1.11E+06	3.65E+05	0.70	6.86	99.21	86.82
447	263	480609	2.00E+05	0.30	3.77	99.52	90.58
479	167	393063	2.04E+05	0.25	3.83	99.76	94.42
512 545	97 57	149007	94692.28	0.09	1.78	99.86	96.20
5 4 5 578	57 26	126632 64504	97486.71 59562.80	0.08	1.83 1.12	99.94 99.98	98.03 99.15
611	13	19005	20831.75	0.04	0.39	99.99	99.54
644	5	14042	18102.20	0.01	0.34	100.00	99.88
677	1	1605	2413.58	0.00	0.05	100.00	99.93
710	1	1844	3209.40	0.00	0.06	100.00	99.99
743	1		616.31				
TOTAL 1	.84E+04	1.59E+08	5.32E+06				
TOTAL A	CCEPTED RA	W PARTICLE	S / TOTAL I	MAGES =	18371/	28770.34	= 63.9%
NUMBER	MEAN DIA.=	D ₁₀ D ₃₀ D ₃₂	133.57 µm				
VOLUME	MEAN DIA.=	_D 30	185.52 µm				
SAUIER	MEAN DIA.=	_{D32}	245.96 pm				
NUMBER	MEDIAN DI	$A = D^{N.1}$	124 52 1m				
THE MELLINE	LADIENT DIE	$A = D_{N.5} \dots$ $D_{N.9} \dots$	255 12 1m				
		D	158.47 ım				
VOLUME	MEDIAN DIA	A.=D	281.67 11m				
		D _{V.1} D _{V.5}	442.19 Lm				
		٧.9	,				

22

RELATIVE SPAN= 1.01

Nozzle	Beecomist 360A	Slice Rate	2 MHz
RPM	7700	AVG	0
Spray Pressure	43 psi	DFM	1 cm.
Airspeed	55 mph	BAR	1.5
Flow Rate	3.5 gpm	Distance to Prob	e 15 cm.
Tank Mix	TM Biocontrol	Sample Interval	1 sec.
		Number of Sample	s 60
FILE: C:\PMS\DATA	\02069100 .00 0	Number of Sample	Rings 7

FILE: C:\PMS\DATA\02069100.000
Blade Angle 0 degrees
Number of Tests Combined: 3

UPPER		•	0			ACCUM	LATED
LIMIT	N(RAW)	N/Cm ² s	Gm/M ² S	% N	% VOL.	% N	% VOL.
K							
56	4378	4.33E+07	14258.32	30.32	0.21	30.32	0.21
89	3044	1.42E+07	28136.20	9.90	0.41	40.22	0.61
122	1973	1.14E+07	69467.97	8.00	1.01	48.22	1.62
154	1853	1.67E+07	2.29E+05	11.68	3.31	59.90	4.93
187	1627	1.56E+07	4.03E+05	10.89	5.84	7 0.7 9	10.78
220	1243	1.26E+07	5.49E+05	8.78	7.96	79.5 8	18.74
252	892	7.78E+06	5.30E+05	5.44	7.68	85.02	26.42
284	757	6.22E+06	6.24E+05	4.35	9.05	89.36	35.47
318	740	4.70E+06	6.76E+05	3.29	9.80	92.65	45.27
351	768	3.49E+06	6.82E+05	2.44	9.88	95.09	55 .15
382	691	2.28E+06	5.83E+05	1.60	8.45	96.69	63.60
414	611	1.61E+06	5.29E+05	1.12	7.67	97.81	71.28
447	455	1.10E+06	4.60E+05	0.77	6.66	98.59	77.94
479	317	720513	3.74E+05	0.50	5.41	99.09	83.35
512	242	482100	3.06E+05	0.34	4.44	99.43	87.79
545	155	319484	2.46E+05	0.22	3.57	99.65	91.36
578	96	184445	1.70E+05	0.13	2.47	99.78	93.83
611	64	140149	1.54E+05	0.10	2.23	99.88	96.05
644	3 3	72895	93972.71	0.05	1.36	99.93	97.41
677	26	43525	65444.23	0.03	0.95	99.96	98.36
710	11	37483	65244.14	0.03	0.95	99.99	99.31
743	6	12278	24571.56	0.01	0.36	99.99	99.67
776	3	4613	10548.87	0.00	0.15	100.00	99.82
809	2	1833	4762.29	0.00	0.07	100.00	99.89
842	1	1776	5217.09	0.00	0.08	100.00	99.96
875	0	775	2560.44	0.00	0.04	100.00	100.00
TOTAL 2	.00E+04	1.43E+08	6.90E+06				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 19988/ 51081.67 = 39.1%

NUMBER MEAN DIA.= D $_{10}$ 143.59 um VOLUME MEAN DIA.= D $_{30}$ 209.74 um SAUTER MEAN DIA.= D $_{32}$ 289.22 µm

NUMBER MEDIAN DIA.=D $_{\rm N.5}$... 126.63 $_{\rm LIM}$ D $_{\rm N.9}$... 290.68 $_{\rm LIM}$

VOLUME MEDIAN DIA.=DV.5... 334.09 μ m DV.9... 532.24 μ m

RELATIVE SPAN= 1.05

DTG 84/04/26 15:07:44

DFM=1.0--1.5 MHz

UPPER						ACCU:	MULATED
LIMIT	N (RAW)	N/SEC	gm/SEC	8 7	3 VOL.	<u>₹ </u>	%_VOL.
56	3538	2.08E 08	6.85	70.91	3.78	70.91	3.78
8 9	2098	1.52E 07	3.02	5.17	1.67	76.08	5.45
122	2560	2.02E 07	12.24	6.86	6.76	82.94	12.21
154	2808	2.27E 07	30.99	7.71	17.12	90.66	29.33
187	290 7	1.26E 07	32.57	4.28	17.99	94.94	47.32
219	3458	8.92E 06	39.01	3.04	21.55	97.98	68.87
252	2316	3.85E 06	26.20	1.31	14.47	99.29	83.34
284	1025	1.16E 06	11.69	0.40	6.45	99.68	89.79
318	437	523802	7.53	0.13	4.16	99.86	93.95
351	207	2u 7 256	4.05	0.07	2.24	99.93	96.19
382	69	47560	1.21	0.02	0.67	99.95	96.86
414	4 3	122975	4.05	0.04	2.24	99.99	99.10
447	10	5169	0.22	0.00	0.12	99.99	99.22
47 9	6	27107	1.41	0.01	0.78	100.00	100.00
512	2	116	0.01	0.00	0.00	100.00	100.00
545	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		2.94E 08	181.04				

TOTAL RAW PARTICLES.... 21484/27036-- 79.46%

NUMBER MEAN DIAMETER... 68.44 MICROMETERS S.D.... 52.80

VOLUME MEAN DIAMETER... 105.63 MICROMETERS S.D.... 150.24

SAUTER MEAN DIAMETER... 157.74 MICROMETERS

DTG 84/04/26 14:55:46

DFM=1.0--1.5 MHz

UPPER						ACCU!	MULATED
LIMIT	N (RAW)	N/SEC	∃m\SEC	<u>₹ N</u>	<pre>% VOL.</pre>	<u>₹</u> _ N	₹_VOL.
56	2556	1.75E 08	5.77	73.54	11.47	73.54	11.47
89	2883	2.66E 07	5.28	11.15	10.51	84.69	21.98
122	4385	2.03E 07	12.33	8.52	24.53	93.20	46.51
154	4774	1.32E 07	18.02	5.52	35.84	98.73	82.35
187	3 30 9	2.58E 06	6.67	1.03	13.27	99.81	95.62
219	1085	391809	1.71	0.16	3.41	99.97	99.03
252	192	59992	0.41	0.03	0.81	100.00	99.84
284	28	6012	0.06	0.00	0.12	100.00	99.96
318	4	823	0.01	0.00	0.02	100.00	99 .9 8
351	1	419	0.01	0.00	0.02	100.00	100.00
382	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		2.38E 08	50.26				

TOTAL RAW PARTICLES.... 19217/23859-- 80.54%

NUMBER MEAN DIAMETER... 56.12 MICROMETERS S.D.... 31.39

VOLUME MEAN DIAMETER... 73.87 MICROMETERS S.D.... 96.06

SAUTER MEAN DIAMETER... 97.49 MICROMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 0.00 MICROMETERS $D_{V0.5}...$ 124.82 MICROMETERS $D_{V0.5}...$ 173.30 MICROMETERS

*Values estimated by extrapolation.

Reference #4

Nozzle	Beecomist 360A	Slice Rate 2	MHz
RPM	7000	AVG 0	
Spray Pressure	43 psi	DFM 1	cm.
Airspeed	55 mph	BAR 1	.5
Flow Rate	3.5 gpm	Distance to Probe 1	5 cm.
Tank Mix	Water	Sample Interval 1	sec.
		Number of Samples 6	0
FILE: C:\PMS\DATA	\02059116.200	Number of Sample Ri	nas 7

FILE: C:\PMS\DATA\02059116.200 Blade Angle 0 degrees

Number of Tests Combined: 7

UPPER						ACCUMU	LATED
LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.
56	3704	2.73E+10	898.30	30.46	0.37	30.46	0.37
89	2721	9.83E+09	1954.08	10.96	0.81	41.42	1.18
122	1710	7.23E+09	4388.30	8.06	1.81	49.49	2.99
154	2479	1.58E+10	21625.02	17.63	8.93	67.11	11.92
187	1717	8.71E+09	22533.77	9.71	9.30	76.83	21.22
220	2011	8.03E+09	35126.34	8.96	14.50	85.78	35.72
252	1750	5.69E+09	38763.49	6.35	16.00	92.13	51.72
284	1415	3.06E+09	30725.09	3.41	12.68	95.54	64.41
318	1252	1.80E+09	25892.32	2.01	10.69	97.55	75.10
351	960	1.04E+09	20284.20	1.16	8.37	98.71	83.47
382	613	6.17E+08	15744.62	0.69	6.50	99.40	89.97
414	315	2.79E+08	9200.63	0.31	3.80	99.71	93.77
447	179	1.15E+08	4808.80	0.13	1.99	99.84	95.75
479	87	7.72E+07	4000.90	0.09	1.65	99.92	97.40
512	46	2.94E+07	1870.55	0.03	0.77	99.96	98.18
545	23	1.11E+07	856.21	0.01	0.35	99.97	98.53
578	14	4.06E+06	375.12	0.00	0.15	99.97	98.68
611	4	1.00E+07	1097.97	0.01	0.45	99.98	99.14
644	3	832186	107.28	0.00	0.04	99.99	99.18
677	1	1.32E+07	1982.38	0.01	0.82	100.00	100.00
_							
TOTAL 2	.10E+04	8.96E+10	2.42E+05				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 21004/ 34586 = 60.7%

NUMBER MEAN DIA.= D10.... 126.69 μ m VOLUME MEAN DIA.= D30... 172.88 μ m SAUTER MEAN DIA.= D30... 225.01 μ m NUMBER MEDIAN DIA.=DN.1... 122.56 μ m DN.9... 241.42 μ m VOLUME MEDIAN DIA.=DV.5... 147.52 μ m DV.9... 382.27 μ m

RELATIVE SPAN= 0.94

Nozzle	Beecomist 360A	Slice Rate 2 MHz
RPM	9000	AVG O
Spray Pressure	23 psi	DFM 1 cm.
Airspeed	55 mph	BAR 1.5
Flow Rate	.9 gpm	Distance to Probe 15 cm.
Tank Mix	Water	Sample Interval 1 sec.
		Number of Samples 60
FILE: C:\PMS\DATA\	01319111.000	Number of Sample Rings 7

FILE: C:\PMS\DATA\01319111.000 Blade Angle 0 degrees

Number of Tests Combined: 7

UPPER						ACCUMU	LATED
LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.
ßo							
56	4046	3.00E+10	985.95	30.58	0.65	30.58	0.65
89	3032	1.10E+10	2194.25	11.26	1.45	41.84	2.10
122	2159	1.22E+10	7378.11	12.40	4.88	54.24	6.99
154	2616	1.65E+10	22541.20	16.81	14.91	71.05	21.90
187	3300	1.60E+10	41442.68	16.34	27.42	87.39	49.31
220	2313	8.21E+09	35938.70	8.38	23.78	95.77	73.09
252	1100	2.52E+09	17160.69	2.57	11.35	98.34	84.44
284	731	8.89E+08	8930.39	0.91	5.91	99.24	90.35
318	387	3.82E+08	5486.7 3	0.69	3.63	99.63	93.98
351	152	1.51E+08	2949.19	0.15	1.95	99.79	95.93
382	49	1.15E+08	2932.89	0.12	1.94	99.91	97.87
414	33	8.45E+07	2782.69	0.09	1.84	99.99	99.71
447	8	4.62E+06	192.56	0.00	0.13	100.00	99.84
479	4	1.16E+06	60.11	0.00	0.04	100.00	99.88
512	4	2.50E+06	158.80	0.00	0.11	100.00	99.99
545	2	80593	6.20	0.00	0.00	100.00	99.99
578	0	0	0.00	0.00	0.00	100.00	99.99
611	1	140292	15.38	0.00	0.01	100.00	100.00
ΤΩΤΑΤ.	1 QQE+OA	9 80E+10	1 515405				

TOTAL 1.99E+04 9.80E+10 1.51E+05

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 19937/ 68974 = 28.9%

NUMBER MEAN DIA.= D10 ... 112.35 μ m VOLUME MEAN DIA.= D30 ... 143.40 μ m SAUTER MEAN DIA.= D32 ... 176.10 μ m

NUMBER MEDIAN DIA.=D $_{N.5}^{D}\dots$ 110.66 µm D $_{N.9}^{D}\dots$ 197.19 µm

VOLUME MEDIAN DIA.= $^{D}_{V.1}$... 128.27 µm $^{D}_{V.5}$... 187.85 µm $^{D}_{V.9}$... 282.84 µm

RELATIVE SPAN= 0.82

DIG 84/04/20 14:10:01

DFM=1.0--3.0 Mdz

UPPER							JULATED
LIMIT	N(RAW)	N/SEC	gm/SEC	<u>z n</u>	Z VOL.	<u>z n</u>	% VOL.
56	1665	1.33E U8	4.37	53.29	2.23	53.29	2.23
89	2997	3.58E 07	7.11	14.34	3.63	67.62	5.87
122	1667	1.85E 07	11.26	7.43	5.75	75.05	11.62
154	2742	3.12⊡ ∪7	42.67	12.50	21.79	87.55	33.41
187	2771	1.735 07	44.73	6.92	22.84	94.47	56.25
219	2593	8.75E 03	38.26	3.51	19.54	97.98	75.79
252	1644	2.89E 06	19.66	1.16	10.04	99.13	85.83
284	1039	1.44E 06	14.45	0.58	7.38	99.71	93.20
318	343	427830	3.15	0.17	3.14	99.88	96.35
351	10 7	239657	4.69	0.10	2.39	99.98	98.74
382	3.5	23085	0.59	0.01	0.30	99.99	99.04
414	9	1961	0.06	0.00	0.03	99.99	99.07
447	7	2056	0.09	0.00	0.04	99.99	99.12
479	2	33345	1.73	0.01	88.0	100.00	100.00
512	0	U	0.00	0.00	0.00	100.00	100.00
CJATCT		2.50E U8	195.84				

TOTAL RAW PARTICLES.... 17621/20883-- 84.38%

NUMBER MEAN DIAMETER... 80.72 MICROMETERS S.D.... 55.57

VOLUME MEAN DIAMETER... 114.47 MICROMETERS S.D.... 149.61

SAUTER MEAN DIAMETER... 156.21 MICROMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 112.65 MICROMETERS $D_{V0.5}...$ 178.25 MICROMETERS $D_{V0.5}...$ 0.89

 $D_{N0.9}$... 165.96 MICROMETERS $D_{V0.9}$... 270.46 MICROMETERS

DIG 84/04/26 14:30:41

DFM=1.0--3.0 MHz

UPPER						ACCU,	1ULATED
LIMIT	3 (RAW)	NISEC	qm/SEC	₹	&_VOL.	<u>8</u> − <u>i₁</u>	& VOL.
56	1908	1.17E 08	3.84	66.43	8.82	66.43	8.82
89	3283	2.53E 07	5.03	14.40	11.55	80.83	20.36
122	4311	1.98E 07	12.01	11.25	27.57	92.08	47.93
154	48 36	1.17E 07	16.04	6.67	36.82	98.75	84.75
187	2653	1.80E UG	4.67	1.03	10.73	99.78	95.40
219	881	311858	1.36	0.18	3.13	99.95	98.61
252	305	72943	0.50	0.04	1.14	99.99	99.75
284	78	9549	0.10	0.01	0.22	100.00	99.97
318	13	720	0.01	Ú.00	0.02	100.00	100.00
351	2	105	0.00	0.00	0.00	100.00	100.00
382	U	0	0.00	0.00	0.00	100.00	100.00
CALATCI		1.76E 08	43.55				

TOTAL RAW PARTICLES.... 18270/21046-- 86.81%

NUMBER MEAN DIAMETER... 60.08 MICROMETERS S.D.... 33.22

VOLUME MEAN DIAMETER... 77.96 MICROMETERS S.D.... 97.83

SAUTER MEAN DIAMETER... 100.52 MICROMETERS

 $D_{N0.9}$... 115.84 MICROMETERS $D_{V0.9}$... 170.42 MICROMETERS

AU5000,150 MPH,5.7 GPM,1 PART DIPEL 6L,1 PART WATER

DTG 85/05/08 14:24:00

50 PSI

BLADE ANGLE 45 DEGREES

R.S.... 0.85

DFM=1.0--4.0 MHz

UPPER			8000 RPM			ACCU	MULATED
LIMIT	N (RAW)	N/SEC	gm/SEC	8 N	% VOL.	<u>₹_N</u>	% VOL.
56 89	1026 3384	2.74E 08 1.01E 08	9.01 20.03	52.74	4.24	52.74	4.24
122	4020	7.23E 07	43.90	19.40 13.92	9.42 20.64	72.14 86.06	13.65
154	4218	4.88E 07	66.79	9.40	31.41	95.46	65.70
187	2726	1.86E 07	48.10	3.58	22.62	99.04	88.32
219	917	4.21E 06	18.39	0.81	8.65	99.85	96.97
252	179	578356	3.94	0.11	1.85	99.96	98.83
284	39	172230	1.73	0.03	0.81	99.99	99.64
318	8	50773	0.73	0.01	0.34	100.00	99.98
351	1	701	0.01	0.00	0.01	100.00	99.99
382	0	0	0.00	0.00	0.00	100.00	99.99
414	1	729	0.02	0.00	0.01	100.00	100.00
447	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		5.19E 08	212.66				

TOTAL RAW PARTICLES.... 16519/25269-- 65.37%

NUMBER MEAN DIAMETER... 70.73 MICROMETERS S.D.... 40.49

VOLUME MEAN DIAMETER... 92.16 MICROMETERS S.D.... 113.01

SAUTER MEAN DIAMETER... 117.88 MICROMETERS

 $D_{N0.1}$... 0.00 MICROMETERS $D_{V0.1}$... 76.46 MICROMETERS

D_{N0.5}... 0.00 MICROMETERS D_{V0.5}... 138.11 MICROMETERS

D_{NO.9}... 135.44 MICROMETERS D_{VO.9}... 193.34 MICROMETERS

Nozzle	AU5000	Slice Rate	4 MHz
RPM	7600	AVG	20000
Spray Pressure	40 psi	DFM	1 cm.
Airspeed	135 mph	BAR	1.5
Flow Rate	.95 gpm	Distance to Prob	e 46 cm.
Tank Mix	DIPEL BL, NEAT	Sample Interval	60 sec.
Blade Angle	Not reported	Number of Sample	s 1
FILE: C:\PMS\DATA	\09248509.003	Number of Sample	Rings 9

Number of Tests Combined:2

UPPER						ACCU	MULATED
LIMIT	N(RAW)	_N/SEC	Gm/SEC	<u>%_N</u>	%_YOL.	<u>%_N</u>	%_YQL.
56 89 122 154 187 225 252 284 318 351 382 414 447 479	9560 25347 24148 16362 5089 747 58 8 2 0	6.27E+07 2.41E+07 1.78E+07 9.12E+06 2.06E+06. 238287 18843 3146 878 0	2.06 4.80 10.81 12.49 5.33 1.04 0.13 0.03 0.01 0.00	54.02 20.78 15.34 7.86 1.78 0.21 0.02 0.00 0.00	5.60 13.02 29.36 33.91 14.48 2.83 0.35 0.09 0.00 0.00	54.02 74.80 90.14 98.00 99.77 99.98 100.00 100.00 100.00 100.00	5.60 18.63 47.99 81.90 96.38 99.21 99.56 99.64 99.68 99.68 99.69 99.72
512 545		0 1363	0.00 0.10	0.00 0.00	0.00 0.28	100.00 100.00	99.72 100.00
TOTAL	8.13E+04	1.16E+08	36.82				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 81324/ 101173 = 80.4%

NUMBER MEAN DIA.= D10... 66.99 μ m VOLUME MEAN DIA.= D30... 84.65 μ m SAUTER MEAN DIA.= D32... 105.53 μ m

VOLUME MEDIAN DIA.=DV.1... 67.41 μm
DV.5... 123.56 μm
DV.9... 172.77 μm

RELATIVE SPAN= 0.85

AU5000,110 MPH,1.6 GPM,1 PART DIPEL 8L,3 PARTS WATER, 4600 RPM

DTG 85/05/17 11:53:00

35 PSI

BLADE ANGLE 55 DEGREES

R.S.... 0.73

DFM=1.0--4.0 MHz

UPPER						ACC UI	MULATED
LIMIT	N(RAW)	N/SEC	gm/SEC	<u>8 N</u>	% VOL.	<i>8</i>	% VOL.
56	4058	4.46E 07	1.47	46.40	2.79	46.40	2.79
89	9910	1.70E 07	3.38	1 7. 72	6.44	64.11	9.22
122	10173	1.54E 07	9.34	16.01	17.77	80.12	26.99
154	9346	1.18E 07	16.07	12.23	30.56	92.35	5 7. 55
187	6658	5.86E 06	15.18	6.10	28.87	98.45	86.43
219	2039	1.29E 06	5.65	1.34	10.74	99.79	97.16
252	333	175384	1.19	0.18	2.27	99.97	99.43
284	49	21591	0.22	0.02	0.41	99.99	99.85
318	8	5480	0.08	0.01	0.15	100.00	100.00
351	1	111	0.00	0.00	0.00	100.00	100.00
382	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		9.61E 07	52.59				

TOTAL RAW PARTICLES.... 42575/54428-- 78.22%

NUMBER MEAN DIAMETER... 78.58 MICROMETERS S.D.... 45.00

VOLUME MEAN DIAMETER... 101.52 MICROMETERS S.D.... 119.12

SAUTER MEAN DIAMETER... 127.58 MICROMETERS

 $D_{N0.1}$... 0.00 MICROMETERS $D_{V0.1}$... 90.38 MICROMETERS

D_{N0.5}... 62.98 MICROMETERS D_{V0.5}... 146.45 MICROMETERS

D_{N0.9}... 148.27 MICROMETERS D_{V0.9}... 197.93 MICROMETERS

Nozzle	AU5000	Slice Rate	4 MHz
RPM	7600	AVG	20000
Spray Pressure	45 psi	DFM	1 cm.
Airspeed	135 mph	BAR	1.5
Flow Rate	1.9 gpm	Distance to Prob	e 46 cm.
Tank Mix	50% DIPEL 8L,50%	Sample Interval	60 sec.
	WATER	Number of Sample	s 1
FILE: C:\PMS\DATA	08308511.003	Number of Sample	Rings 9
Blade Angle	Not reported		
Number of Tosts Co	mbined:2		

Number of Tests Combined:2

UPPER						ACCU	MULATED
LIMIT	N(RAW)	_N/SEC	Gm/SEC	<u>%_N</u>	%_YOL.	<u>%_N</u>	%_VOL.
56	9331	1.34E+08	4.40	57.04	5.85	57.04	5.85
89 122	20368 20816	4.49E+07 3.17E+07	8.92 19.26	19.13 13.52	11.86 25.61	76.17 89.69	17.72 43. 3 3
154	17122	1.82E+07	24.97	7.78	33.21	97.47	76.54
187	6310	5.00E+06	12.95	2.13	17.22	99.60	93.75
220	1196	766 89 5	3.36	0.33	4.46	99.93	98.22
252	222	133914	0.91	0.06	1.21	99.98	99.43
284	50	28407	0.29	0.01	0.38	100.00	99.81
318	10	5630	0.08	0.00	0.11	100.00	99.92
351	5	3079	0.06	0.00	0.08	100.00	100.00
382	0	0	0.00	0.00	0.00	100.00	100.00
414	2	90	0.00	0.00	0.00	100.00	100.00
TOTAL	7.54E+04	2.35E+08	75.19				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 75432/ 104882 = 71.9%

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NUMBER MEAN DIA.= D10... 65.95 \mum VOLUME MEAN DIA.= D30... 84.95 \mum SAUTER MEAN DIA.= D30... 108.01 \mum
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NUMBER MEDIAN DIA.= $D_{N.5}$... <56 μ m $D_{N.9}$... 122.93 μ m

VOLUME MEDIAN DIA.=DV.1... 67.81 µm DV.5... 128.23 µm DV.9... 180.11 µm

RELATIVE SPAN= 0.88

Nozzle	AU5000	Slice Rate	4 MHz
RPM	12700	AVG	20000
Spray Pressure	40 psi	DFM	1 cm.
Airspeed	135 mph	BAR	1.5
Flow Rate	2.6 gpm	Distance to Probe	46 cm.
Tank Mix	50% DIPEL 8L,50%	Sample Interval	60 sec.
	WATER	Number of Samples	1
FILE: C:\PMS\DATA\D	9038514.003	Number of Sample 1	Rings 9

Blade Angle Not reported Number of Tests Combined:2

UPPER						ACCU	MULATED
FIWII	N(RAW)	_N/SEC	Gm/SEC	<u>%_N</u>	%_VOL.	%_N	%_YOL.
56 89 122 154 187 220 252 284 318 351	7016 18697 20114 14566 4298 761 179 47 7	1.55E+08 4.69E+07 2.84E+07 1.39E+07 3.06E+06 493841 106208 16567 1902 433	5.09 9.32 17.25 18.98 7.93 2.16 0.72 0.17 0.03	62.50 18.93 11.48 5.60 1.24 0.20 0.04 0.01	8.25 15.11 27.98 30.79 12.86 3.50 1.17 0.27 0.04	62.50 81.43 92.91 98.51 99.75 99.99 100.00 100.00	8.25 23.36 51.34 82.13 94.98 98.49 99.66 99.93 99.97
382	1	283	0.01	0.00	0.01	100.00	100.00
TOTAL	6.57E+04	2.48E+08	61.66				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 65687/ 96112 = 68.3%

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NUMBER MEAN DIA.= D10... 60.99 \mum VOLUME MEAN DIA.= D30... 78.10 \mum SAUTER MEAN DIA.= D32... 99.54 \mum NUMBER MEDIAN DIA.= DN.1... (56 \mum DN.5... \mum VOLUME MEDIAN DIA.= DV.1... 60.08 \mum DV.5... 120.36 \mum DV.9... 174.51 \mum
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RELATIVE SPAN= 0.95

FILE NUMBER: - 143

Foray Undiluted (BBN 6000) AU5000, 110 MPH 6.0 liters/min. 8170 RPM

STATISTICS

PSI and Blade Angle not reported

THE TABLES USE THE FOLLOWING CODE

Number = (0) Length = (1)

Area = (2)

Volume = (3)

PERCENTILES um

%	(0)	(1)	(2)	(3)
10.0	13.3	15.7	25.8	47.5
15.9	14.9	18.7	33.6	59.0
25.0	17.3	23.3	45.5	73.0
50.0	24.0	42.9	76.6	102.5
75.0	40.6	76.4	109.9	135.3
84.1	54.9	93.8	126.5	152.1
90.0	70.2	109.5	142.3	166.6

DROPLET SPECTRUM PARAMETERS

NUMBER	MEDIAN DIAM	24.0	microns
NUMBER	AVERAGE DIAM	34.3	microns
VOLUME	AVERAGE DIAM	53.3	microns
SAUTER	AVERAGE DIAM	81.3	microns
VOLUME	MEDIAN DIAM	102.5	microns

SPECTRUM 'WIDTH' PARAMETERS

CDAN (ACMM)	19.12
SPAN (ASTM) 1	
RELATIVE SPAN	1.16
'R' (VMD/NMD)	4.27

DROPS/LITRE :- 1.26E+010

TOTAL RAW NO .:-

SAMPLE TIME (secs):- 599

FREQUENCY AND ACCUMULATED PERCENTAGE DATA

size µm		Number (0)	I.	ength 1)		Area (2)		Volume (3)
25.5 40.4 55.2 70.1 84.9 99.6 114.3 129.2 145.2	55.7 19.2 9.5 5.6 3.9 2.5 1.5	55.7 74.8 84.3 89.9 93.9 96.4 97.9 98.9	29.3 18.4 13.3 10.2 8.9 6.7 4.8 3.4 2.2	29.3 47.7 61.0 71.2 80.1 86.8 91.6 95.0 97.2	9.8 11.2 11.7 11.8 12.7 11.4 9.5 7.6 5.5	9.8 20.9 32.6 44.4 57.0 68.4 77.9 85.5 91.0	2.2 4.5 6.9 9.1 12.1 12.9 12.5 11.4 9.3	2.2 6.7 13.5 22.6 34.7 47.6 60.0 71.5 80.8
158.9 173.4 188.3 203.0 217.8 232.5	.3 .2 .1 .0 .0 .0	99.7 99.9 99.9 100.0 100.0	1.3 .8 .3 .2 .1	98.4 99.2 99.5 99.7 99.9	3.6 2.3 1.2 .8 .4	94.6 96.9 98.1 98.8 99.3	6.7 4.8 2.6 1.8 1.1	87.4 92.2 94.8 96.6 97.8
247.5 262.5 277.5 292.5 307.5 322.5 337.5	.0	100.0 100.0 100.0 100.0 100.0 100.0	.0	100.0 100.0 100.0 100.0 100.0 100.0	.2 .1 .1 .0 .0 .0 .0 .0	99.7 99.8 99.9 99.9 100.0 100.0	.5 .4 .3 .2 .1	99.0 99.3 99.6 99.8 99.9 99.9
352.5 367.5	. 0 . 0	100.0 100.0	.0	100.0 100.0	.0	100.0 100.0	.1	100.0

FILE NUMBER: - 131

Foray Undiluted (BBN 4008) AU5000, 110 MPH, 4.5 liters/min. 8500 RPM PSI and Blade Angle not reported

STATISTICS

THE TABLES USE THE FOLLOWING CODE

Number = (0) Length = (1) Area = (2) Volume = (3)

PERCENTILES um

%	(0)	(1)	(2)	(3)
10.0	13.9	17.5	29.9	49.2
15.9	15.8	21.5	37.7	60.1
25.0	18.7	28.0	49.4	73.3
50.0	28.2	49.3	78.7	99.8
75.0	48.6	81.3	108.5	129.3
84.1	63.8	96.8	123.8	146.1
90.0	78.6	110.8	138.4	160.0

DROPLET SPECTRUM PARAMETERS

NUMBER MEDIAN DIAM	28.2 microns
NUMBER AVERAGE DIAM	1 38.2 microns
VOLUME AVERAGE DIAM	f 56.7 microns
SAUTER AVERAGE DIAM	82.1 microns
VOLUME MEDIAN DIAM	99.8 microns

SPECTRUM 'WIDTH' PARAMETERS

sigmag(0),(3)	1.78 1.66
SPAN (ASTM)	110.85
RELATIVE SPAN	1.11
'R' (VMD/NMD)	3.54

DROPS/LITRE :- 1.05E+010

TOTAL RAW NO .: -

SAMPLE TIME (secs):- 352

FREQUENCY AND ACCUMULATED PERCENTAGE DATA

size µm		Number		ength		Area (2)		Volume (3)
25.5 40.4 55.2 70.1 84.9 99.6 114.3 129.2 145.2 158.9 173.4 188.3 203.0 217.8 232.5 247.5 262.5 277.5 292.5	45.9 22.7 11.5 7.0 5.1 3.4 2.0 1.2 .6 .3 .2 .1 .0 .0	45.9 68.6 80.1 87.0 92.2 95.6 97.6 98.8 99.7 99.9 100.0 100.0	21.7 19.6 14.3 11.4 10.4 8.2 5.6 3.7 2.2 1.2 .7 .3 .2 .1	21.7 41.3 55.7 67.1 77.5 85.7 91.3 95.1 97.3 98.5 99.6 99.9 99.9 100.0 100.0 100.0	6.8 11.1 11.8 12.3 13.9 13.0 10.4 7.8 5.3 3.2 2.1 1.0 .6 .4 .2	6.8 17.8 29.6 41.9 55.8 68.7 79.1 87.0 92.4 97.5 99.5 99.8 99.9 100.0 100.0	1.5 4.4 6.8 9.4 13.1 14.6 13.5 11.6 8.8 5.9 4.2 2.3 1.4	1.5 5.9 12.2 35.2 49.3 74.9 83.7 93.2 97.6 99.4 99.8 99.9 99.9
322.5 337.5 352.5	. 0 . 0 . 0	100.0 100.0 100.0	. 0 . 0 . 0	100.0 100.0 100.0	. 0 . 0 . 0	100.0 100.0 100.0	.1 .0 .0	100.0 100.0 100.0

FILE NUMBER:- 139

Foray Undiluted (BBN 6000) AU5000, 110 MPH 4.5 liters/min.

8630 RPM

PSI and Blade Angle not reported

STATISTICS

THE TABLES USE THE FOLLOWING CODE

Number =(0)Length =(1)

Area =(2)

Volume = (3)

PERCENTILES um

%	(0)	(1)	(2)	(3)
10.0	13.8	17.3	30.0	50.5
15.9	15.6	21.2	38.5	61.5
25.0	18.5	27.6	50.2	74.9
50.0	27.4	49.6	80.0	103.6
75.0	48.5	82.0	112.0	137.1
84.1	63.6	98.2	128.6	154.3
90.0	78.6	113.5	144.7	169.2

DROPLET SPECTRUM PARAMETERS

NUMBER	MEDIAN DIAM	27.4	microns
NUMBER	AVERAGE DIAM	38.1	microns
VOLUME	AVERAGE DIAM	57.6	microns
SAUTER	AVERAGE DIAM	84.8	microns
VOLUME	MEDIAN DIAM	103.6	microns

SPECTRUM 'WIDTH' PARAMETERS

sigma g (0),(3)	1.75 1.68
SPAN (ASTM)	118.64
RELATIVE SPAN	1.15
'R' (VMD/NMD)	3.78

DROPS/LITRE :- 1.00E+010

TOTAL RAW NO .: -

SAMPLE TIME (secs):- 551

FILE NUMBER :- 139

FREQUENCY AND ACCUMULATED PERCENTAGE DATA

size µm		Number		ength 1)		Area		Volume
25.5 40.4 55.1 84.6 99.3 129.2 145.9 173.3 129.3 173.3 188.3 217.5 237.5 2677.5 2977.5 2977.5 2977.5 3077.5	47.2 21.4 11.6 6.9 5.1 3.2 1.9 1.2 .0 .0 .0 .0 .0	47.2 68.7 80.2 87.1 92.2 95.4 97.3 98.5 99.6 99.9 100.0 100.0 100.0 100.0 100.0 100.0	22.4 18.5 14.5 11.3 10.3 7.8 5.5 3.8 2.5 1.4 .9 .4 .2 .1 .0 .0 .0 .0	22.4 40.9 55.4 66.7 77.0 84.9 90.3 94.1 96.6 99.4 99.7 99.9 100.0 100.0 100.0 100.0	6.9 10.3 11.7 12.0 13.5 12.3 9.9 7.9 5.8 7.2 1.3 .0 .0 .0 .0	6.9 17.29 40.4 66.4 90.55 84.4 90.55 90.58 90.58 90.58 90.59	1.5 4.0 6.6 8.9 12.3 13.3 12.5 11.3 6.6 2.8 1.2 .9 .4 .2 .1 .0 .0 .0	1.5.19361373531428135677861.373531428135677889999999999999999999999999999999999
382.5 397.5	. 0	100.0	.0	100.0	.0	100.0	.1	99.8 99.9
397.5 442.5	.0	100.0	.0	100.0	.0	100.0	.1	99.9
						100.0		
472.5	. 0	100.0	. 0	100.0	. 0	100.0	. 1	100.0

FILE NUMBER:- 133 Foray Undiluted (PPQ2705) AU5000, 110 MPH 4.5 liters/min. STATISTICS 8900 RPM PSI and Blade Angle not reported THE TABLES USE THE FOLLOWING CODE Number =(0)Length = (1) Area = (2)Volume = (3)PERCENTILES um % (0) (1) (2) (3) 10.0 14.1 18.3 31.9 51.9 15.9 16.1 22.7 40.7 62.5 25.0 19.2 30.0 52.4 75.6 50.0 30.0 52.6 81.6 103.9 75.0 51.7 84.4 112.7 135.5 84.1 67.2 100.7 128.5 151.9 90.0 81.9 115.3 143.8 166.1 DROPLET SPECTRUM PARAMETERS NUMBER MEDIAN DIAM 30.0 microns NUMBER AVERAGE DIAM 40.1 microns VOLUME AVERAGE DIAM 59.5 microns SAUTER AVERAGE DIAM 85.8 microns VOLUME MEDIAN DIAM 103.9 microns SPECTRUM 'WIDTH' PARAMETERS sigma g (0),(3) 1.86 1.66 SPAN (ASTM) 114.17 RELATIVE SPAN 1.10 'R' (VMD/NMD) 3.46 DROPS/LITRE :-9.08E+009 TOTAL RAW NO.:-SAMPLE TIME (secs):-737

FREQUENCY AND ACCUMULATED PERCENTAGE DATA

	N	umber	Le	ength		Area		Volume
size um		(0)	(1)		(2)		(3)
25.5 40.4 55.2 70.1 84.9 99.6 114.3	43.2 22.3 12.4 7.7 5.5 3.6 2.3	43.2 65.5 77.9 85.6 91.1 94.7 97.0	19.5 18.3 14.8 12.0 10.7 8.3 6.1	19.5 37.8 52.6 64.6 75.3 83.7 89.7	5.8 9.9 11.5 12.3 13.5 12.5 10.6	5.8 15.6 27.2 39.5 53.0 65.6 76.1	1.2 3.8 6.4 9.0 12.2 13.5	1.2 5.0 11.4 20.4 32.6 46.1 59.3
129.2 145.2 158.9 173.4	1.4 .8 .4	98.4 99.2 99.6 99.8	4.2 2.7 1.5	93.9 96.6 98.2 99.1	8.4 6.0 3.8 2.5	84.5 90.5 94.4 96.8	11.9 9.6 6.8 4.8	71.2 80.8 87.6 92.4
188.3 203.0 217.8	.1	99.9 100.0 100.0	.4 .2 .1	99.5 99.7 99.9	1.3 .7 .4	98.1 98.9 99.3	2.7 1.7 1.1	95.1 96.8 97.9
232.5 247.5 262.5 277.5	. 0	100.0	.1	99.9 100.0 100.0	.3	99.5 99.7 99.8	.7 .4 .3	98.5 98.9 99.3
292.5 307.5 322.5	.0	100.0 100.0 100.0	.0	100.0 100.0 100.0	.1 .0 .0	99.9 99.9 99.9	.2 .1 .0 .0	99.4 99.6 99.6
337.5 352.5 367.5	.0	100.0 100.0 100.0	.0	100.0 100.0 100.0	.0	99.9 99.9 99.9	.0	99.7 99.7 99.8
382.5 397.5 427.5	.0	100.0 100.0 100.0	.0	100.0 100.0 100.0	.0	99.9 100.0 100.0	.0 .1 .0	99.8 99.8 99.9
442.5 457.5	.0	100.0 100.0	. 0 . 0	100.0	.0	100.0	.1	100.0

FILE NUMBER: - 141

Foray Undiluted (BBN 6000) AU5000, 110 MPH 3.0 liters/min. 9630 RPM

STATISTICS

PSI and Blade Angle not reported

THE TABLES USE THE FOLLOWING CODE

Number = (0)

Length =(1)

Area =(2)

Volume = (3)

PERCENTILES um

%	(0)	(1)	(2)	(3)
10.0	13.6	16.5	26.7	43.2
15.9	15.4	19.9	33.2	52.7
25.0	18.1	25.2	43.1	64.3
50.0	25.7	43.4	69.0	89.9
75.0	43.8	71.1	97.0	119.8
84.1	56.2	85.1	112.2	136.3
90.0	69.2	98.4	126.5	150.5

DROPLET SPECTRUM PARAMETERS

NUMBER	MEDIAN DIAM	25.7	microns
NUMBER	AVERAGE DIAM	35.1	microns
VOLUME	AVERAGE DIAM	51.2	microns
SAUTER	AVERAGE DIAM	73.5	microns
VOLUME	MEDIAN DIAM	89.9	microns

SPECTRUM 'WIDTH' PARAMETERS

sigma g (0),(3)	1.67 1.71
SPAN (ASTM)	107.31
RELATIVE SPAN	1.19
'R' (VMD/NMD)	3.50

DROPS/LITRE :- 1.42E+010

TOTAL RAW NO .:-

SAMPLE TIME (secs):- 147

FILE NUMBER :- 141

FREQUENCY AND ACCUMULATED PERCENTAGE DATA

		Number	Le	ength		Area		Volume
size µm		(0)	(1)		(2)		(3)
25.5 40.4 55.2 70.1 84.9 99.6 114.3 129.2 145.2 158.9 173.4	49.7 22.7 11.3 6.7 4.4 2.5 1.3 .7 .4	49.7 72.3 83.7 90.4 94.8 97.3 98.6 99.3 99.7 99.8 99.9	25.6 21.3 15.4 12.0 9.7 6.5 4.0 2.4 1.5 .8	25.6 46.9 62.3 74.3 84.0 90.5 94.5 97.0 98.4 99.2 99.6	8.9 13.5 14.2 14.5 14.5 11.5 8.3 5.7 3.9 2.3 1.4	8.9 22.4 36.6 51.0 65.6 77.1 85.3 91.0 94.9 97.2 98.5	2.2 6.0 9.2 12.3 15.3 14.4 12.0 9.4 7.3 4.7	2.2 8.2 17.4 29.8 45.1 59.5 71.5 80.9 88.2 92.9 95.9
188.3 203.0 217.8	.0	100.0 100.0 100.0	. 2 . 1 . 0	99.8 99.9 100.0	. 6 . 4 . 2	99.2 99.5 99.7	1.6 .9 .5	97.5 98.4 99.0
232.5 247.5 262.5	.0	100.0 100.0 100.0	.0	100.0 100.0 100.0	.1	99.8 99.9 99.9	.4	99.4 99.6 99.7
277.5 292.5 307.5 322.5 352.5	.0	100.0 100.0 100.0 100.0	.0	100.0 100.0 100.0 100.0	.0	100.0 100.0 100.0 100.0	.1 .0 .0 .0	99.8 99.9 99.9 100.0 100.0

Nozzle	AU5000	Slice Rate	4 MHz
RPM	9500	AVG	100
Spray Pressure	9 psi	DFM	1 cm.
Airspeed	100 mph	BAR	1.5
Flow Rate	.47 gpm	Distance to Prob	e 50 cm.
Tank Mix	NOVO Foray 48B	Sample Interval	1 sec.
	(Undiluted)	Number of Sample	s 60
FILE: C:\PMS\DA	ATA\05169014.000	Number of Sample	Rings 7

FILE: C:\PMS\DATA\05169014.000 Blade Angle 45 degrees

Number of Tests Combined: 3

UPPER						ACCU	MULATED
LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.
							
56	2817	2.21E+07	0.73	68.46	8.82	68.46	8.82
89	4939	4.04E+06	0.80	12.49	9.72	80.94	18.54
122	4421	3.51E+06	2.13	10.84	25.76	91.78	44.30
154	3112	2.07E+06	2.84	6.41	34.35	98.19	78.66
187	993	485857	1.26	1.50	15.22	99.69	93.87
220	230	79747	0.35	0.25	4.22	9 9.93	98.10
252	38	18882	0.13	0.06	1.56	99.99	99.65
284	5	1507	0.02	0.00	0.18	100.00	99.84
318	1	47	0.00	0.00	0.01	100.00	99.85
351	0	541	0.01	0.00	0.13	100.00	99.97
382	1	87	0.00	0.00	0.03	100.00	100.00
-							
TOTAL 1	.66E+04	3.24E+07	8.26				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 16557/ 20619.67 = 80.3%

NUMBER MEAN DIA.= D $_{10}$ 59.71 µm VOLUME MEAN DIA.= D $_{30}$ 78.74 µm SAUTER MEAN DIA.= D $_{32}$ 103.28 µm

NUMBER MEDIAN DIA.=D $_{N.5}^{D}\dots$ <56 μm $_{D_{N.9}}^{D}\dots$ 116.53 μm

VOLUME MEDIAN DIA.=DV.1... 60.28 μm DV.5... 127.07 μm DV.9... 178.90 μm

RELATIVE SPAN= 0.93

No report - data provided by Temple Bowen, Novo Labs.

Nozzle RPM Spray Pressure Airspeed Flow Rate Tank Mix	AU5000 9500 15 psi 115 mph .76 gpm NOVO Forav 48B	Slice Rate AVG DFM BAR Distance to Probe Sample Interval	
Tank Mix FILE: C:\PMS\DATA\0	NOVO Foray 48B (Undiluted)	Sample Interval Number of Samples Number of Sample	60
Blade Angle	35 degrees	Number of Sample	KIIIGS I

Number of Tests Combined: 1

UPPER						ACCU	MULATED
LIMIT P	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.
							•
56	5644	6.03E+07	1.98	63.48	10.13	63.48	10.13
89	9160	1.93E+07	3.83	20.28	19.56	83.76	29.70
122	5673	1.12E+07	6.81	11.82	34.82	95.58	64.51
154	3526	3.42E+06	4.68	3.60	23.93	99.18	88.44
187	1674	661660	1.71	0.70	8.75	99.88	97.19
220	307	106675	0.47	0.11	2.38	99.99	99.57
252	40	10164	0.07	0.01	0.35	100.00	99.93
284	4	736	0.01	0.00	0.04	100.00	99.97
318	0	158	0.00	0.00	0.01	100.00	99.98
351	1	106	0.00	0.00	0.01	100.00	99.99
382	1	32	0.00	0.00	0.00	100.00	99.99
414	0	0	0.00	0.00	0.00	100.00	99.99
447	1	38	0.00	0.00	0.01	100.00	100.00
TOTAL	2.60E+04	9.50E+07	19.57				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 26030/ 38342.5 = 67.9%

NUMBER MEAN DIA.= D $_{10}$... 58.76 µm VOLUME MEAN DIA.= D $_{30}$... 73.31 µm SAUTER MEAN DIA.= D $_{32}$... 91.36 µm NUMBER MEDIAN DIA.=DN.5... <56 μm $D_{N.9}$... 106.37 μm VOLUME MEDIAN DIA.=DV.1... 56.04 μm DV.5... 108.18 μm DV.9... 160.18 μm

RELATIVE SPAN= 0.96

No report - data provided by Temple Bowen, Novo Labs.

Nozzle	AU5000	Slice Rate	4 MHz
R PM	9500	AVG	100
Spray Pressure	15 psi	DFM	1 cm.
Airspeed	115 mph	BAR	1.5
Flow Rate	.5 gpm	Distance to Probe	50 cm.
Tank Mix	NOVO Foray 48B	Sample Interval	1 sec.
	(Undiluted)	Number of Samples	
FILE: C:\PMS\DATA\C	4249009.500	Number of Sample	Rings 7

Blade Angle 35 degrees

Number of Tests Combined: 1

UPPER						ACCU	MULATED
LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.
							
56	5426	3.15E+07	1.04	63.30	10.25	63.30	10.25
89	9035	1.09E+07	2.17	21.97	21.50	85.27	31.74
122	5191	5.09E+06	3.09	10.23	30.58	95.51	62.32
154	3468	1.77E+06	2.42	3.55	23.93	99.06	86.26
187	1215	386477	1.00	0.78	9.90	99.84	96.16
220	235	65535	0.29	0.13	2.84	99.97	99.00
252	37	13251	0.09	0.03	0.89	100.00	99.89
284	5	831	0.01	0.00	0.08	100.00	99.97
318	1	112	0.00	0.00	0.02	100.00	99.99
351	0	55	0.00	0.00	0.01	100.00	100.00
TOTAL	2.46E+04	4.97E+07	10.10				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 24613/ 36594.17 = 67.3%

NUMBER MEAN DIA.= D $_{10}$... 58.40 µm VOLUME MEAN DIA.= D $_{30}$... 72.97 µm SAUTER MEAN DIA.= D $_{32}$... 91.29 µm

NUMBER MEDIAN DIA.=DN.1 ... <56 μm $_{DN.5}$... <56 μm $_{DN.5}$... 104.18 μm

VOLUME MEDIAN DIA.=DV.1... <56 µm $_{\rm DV.5}$... 108.64 µm $_{\rm DV.9}$... 166.78 µm

RELATIVE SPAN= 1.02

Extrapolated

No report - data provided by Temple Bowen, Novo Labs.

RPM		8400		AVG		10	^
	Pressure	30 psi		DFM			
Airspe		100 mp		DFM 1 cm BAR 1.5			
Flow R		1.4 gr			ance to		
Tank M							
Tank M	1X	NOVO For	•	_	ole Inter		sec.
DTED.	C.\ DMC\ DAG	Undilut A\06059000.0			per of Sa	-	
		35 dec		NUME	er of Sa	whie kiu	gs 1
	-	Combined: 3	irees				
Mannoer.	or rests	combined: 3					
UPPER						ACCU	MULATED
LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.
"S"							
56	5446	1.27E+08	4.17	62.11	9.47	62.11	9.47
89	8057	4.13E+07	8.21	20.24	18.65	82.35	28.12
122	6605	2.57E+07	15.61	12.60	35.46	94.95	63.58
154	5113	8.98E+06	12.29	4.40	27.92	99.35	91.51
187	1395	1.19E+06	3.09	0.58	7.01	99.93	98.52
220	164	111109	0.49	0.05	1.10	99.99	99.62
252	16	18873	0.13	0.01	0.29	100.00	99.92
284	5	2829	0.03	0.00	0.06	100.00	99.98
318	2	182	0.00	0.00	0.01	100.00	99.99
351	1	185	0.00	0.00	0.01	100.00	99.99
382	0	0	0.00	0.00	0.00	100.00	99.99
414	1	52	0.00	0.00	0.00	100.00	100.00
 7	0	23	0.00	0.00	0.00	100.00	100.00
TOTAL	2.68E+04	2.04E+08	44.02				
TATOT	ACCEPTED F	RAW PARTICLES	7 TOTAL	IMAGES =	= 26806/	42397 =	63.2%

Slice Rate

2 MHz

AU5000

Nozzle

NUMBER MEAN DIA.= D $_{10}$... 59.80 μ m VOLUME MEAN DIA.= D $_{30}$... 74.44 μ m SAUTER MEAN DIA.= D $_{32}$... 92.27 μ m

VOLUME MEDIAN DIA.=DV.1... 57.21 μm DV.5... 109.30 μm DV.9... 152.82 μm

RELATIVE SPAN= 0.87

No report - data provided by Temple Bowen, Novo Labs.

Nozzle	AU5000	Slice Rate	4 MHz
RPM	9500	AVG	100
Spray Pressure	48 psi	DFM	1 cm.
Airspeed	115 mph	BAR	1.5
Flow Rate	1.14 gpm	Distance to Prob	e 50 cm.
Tank Mix	NOVO Foray 48B	Sample Interval	1 sec.
	(Undiluted)	Number of Sample	s 60
FILE: C:\PMS\DATA	\05159017.000	Number of Sample	Rings 7

Blade Angle 35 degrees

Number of Tests Combined: 1

UPPER						ACCU	MULATED
LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.
za							
56	5044	6.33E+07	2.08	57.65	8.36	57.65	8.36
89	8712	2.56E+07	5.09	23.33	20.45	80.98	28.81
122	5891	1.57E+07	9.55	14.33	38.35	95.31	67.16
154	3151	4.42E+06	6.05	4.03	24.29	99.34	91.46
187	936	638291	1.65	0.58	6.63	99.92	98.09
220	138	68561	0.30	0.06	1.20	99.98	99.29
252	18	16935	0.12	0.02	0.46	99.99	99.75
284	5	5004	0.05	0.00	0.20	100.00	99.96
318	3	386	0.01	0.00	0.02	100.00	99.98
351	1	119	0.00	0.00	0.01	100.00	99.99
382	1	46	0.00	0.00	0.00	100.00	99.99
414	0	60	0.00	0.00	0.01	100.00	100.00
TOTAL	2.39E+04	1.10E+08	24.91				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 23899/ 32126.84 = 74.4%

NUMBER MEAN DIA.= D_{10} ... 61.60 µm VOLUME MEAN DIA.= D_{30} ... 75.70 µm SAUTER MEAN DIA.= D_{32} ... 92.47 µm NUMBER MEDIAN DIA.= $D_{N.5}$... <56 µm $D_{N.9}$... 109.71 µm VOLUME MEDIAN DIA.= $D_{N.9}$... 58.92 µm VOLUME MEDIAN DIA.= $D_{N.9}$... 107.17 µm

VOLUME MEDIAN DIA.=DV.1... 58.92 µm DV.5... 107.17 µm DV.9... 152.62 µm

RELATIVE SPAN= 0.87

No report - data provided by Temple Bowen, Novo Labs.

RPM		9500		AVG		10	0
Spray P.	ressure	50 psi	Ĺ	DFM		1	cm.
Airspee	d	115 mg	oh .	BAR		1.	5
Flow Ra	te	1.45	pm .	Dis	tance to 1	Probe 50	cm.
Tank Mi	x	NOVO For	ay 48B	Sam	ple Inter	val 1	sec.
		(Undilut	ed)	Num	ber of Sau	mples 60	
FILE: C	:\PMS\DATA	A\05169000.0	000	Num	ber of Sau	mple Rin	gs 7
Blade A	ngle	35 dec	grees				
Number	of Tests (Combined: 3					
UPPER						ACCU	MULATED
LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.
56	4911	7.20E+07	2.37	61.91	8.83	61.91	8.83

2.45E+07 4.87 21.07 18.16 1.40E+07 8.51 12.04 31.70

2.42 0.80

1.03 0.20

3.84

0.01

0.12

0.00

0.00

22.78

9.03

3.83

0.36

5.28

0.03

0.01

6.11

0.10

1.42

0.01

Slice Rate

4 MHz

82.98

95.02

98.86

99.66

99.87

99.88

100.00

100.00

100.00

26.99

58.68

81.46

90.49

94.32

94.68

99.96

99.99

100.00

AU5000

0.00 TOTAL 2.21E+04 1.16E+08 26.83

4.47E+06

936218

235063

14088

141086

570

93

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 22090/ 32454.67 = 68.1%

NUMBER MEAN DIA.= D $_{10}$... 59.97 μ m VOLUME MEAN DIA.= D $_{30}$... 76.12 μ m SAUTER MEAN DIA.= D $_{32}$... 96.83 μ m NUMBER MEDIAN DIA.=D_N.1 ... <56 μm $D_{N.9}$... 108.19 μm

VOLUME MEDIAN DIA.=DV.1... 58.40 μm DV.5... 112.90 μm DV.9... 185.50 μm

RELATIVE SPAN= 1.13

Nozzle

89

122

154

187

220

252

284

318

351

7663

4950

3054

1268

211

23

5

4

1

No report - data provided by Temple Bowen, Novo Labs.

FILE NUMBER: - 145

Foray & Water 1:1 (BBN 6000) AU5000, 110 MPH

9.0 liters/min. 7470 RPM

STATISTICS

PSI and Blade Angle not reported

THE TABLES USE THE FOLLOWING CODE

Number =(0)

Length = (1)

Area = (2)

Volume = (3)

PERCENTILES µm

%	(0)	(1)	(2)	(3)
10.0	13.5	16.6	29.6	53.6
15.9	15.2	20.0	39.5	64.7
25.0	17.8	25.5	52.7	77.6
50.0	25.0	50.7	83.0	105.1
75.0	47.6	84.5	113.3	137.1
84.1	64.4	100.3	129.0	154.2
90.0	80.0	114.8	144.4	170.2

DROPLET SPECTRUM PARAMETERS

NUMBER MEDIAN DIAM	25.0 microns
NUMBER AVERAGE DIAM	37.4 microns
VOLUME AVERAGE DIAM	57.9 microns
SAUTER AVERAGE DIAM	86.8 microns
VOLUME MEDIAN DIAM	105.1 microns

SPECTRUM 'WIDTH' PARAMETERS

sigma g (0),(3)	1.64 1.62
SPAN (ASTM)	116.57
RELATIVE SPAN	1.11
'R' (VMD/NMD)	4.21

DROPS/LITRE :-9.85E+009

TOTAL RAW NO.:-

SAMPLE TIME (secs):- 129

FREQUENCY AND ACCUMULATED PERCENTAGE DATA

		Number	L	ength		Area		Volume
size µm		(0)	(1)		(2)		(3)
25.5	51.9	51.9	25.1	25.1	7.6	7.6	1.6	1.6
40.4	18.1	70.0	16.0	41.0	8.8	16.4	3.3	4.9
55.2	10.1	80.1	12.9	53.9	10.3	26.7	5.7	10.6
70.1	6.5	86.6	10.9	64.8	11.4	38.1	8.2	18.8
84.9	5.1	91.7 95.2	10.5	75.3 83.8	13.6 13.2	51.7 64.9	12.2 14.0	31.0 45.0
99.6 114.3	3.5	95.2	6.0	89.9	10.8	75.7	13.3	58.4
129.2	1.3	97.3	4.1	94.0	8.4	84.2	11.8	70.2
145.2	.7	99.3	2.7	96.7	6.1	90.3	9.7	79.9
158.9	. 4	99.6	1.4	98.1	3.7	94.0	6.4	86.3
173.4	. 2	99.8	.9	99.0	2.5	96.5	4.7	91.0
188.3	.1	99.9	. 4	99.4	1.2	97.7	2.5	93.6
203.0	.0	99.9	. 2	99.6	. 8	98.4	1.7	95.3
217.8	. 0	100.0	. 1	99.8	. 5	98.9	1.2	96.5
232.5	. 0	100.0	. 1	99.9	. 3	99.3	. 9	97.3
247.5	.0	100.C	.0	99.9	. 2	99.4	. 5	97.8
262.5	. 0	100.0	.0	99.9	. 1	99.6	. 4	98.2
277.5	. 0	100.0	. 0	100.0	.1	99.7	. 3	98.5
292.5	. 0	100.0	. 0	100.0	. 1	99.7	. 2	98.7
307.5	. 0	100.0	. 0	100.0	.0	99.8	.1	98.8
322.5	. 0	100.0	.0	100.0	. 0	99.8	. 0	98.9
337.5	. 0	100.0	. 0	100.0	. 0	99.8	. 1	99.0
352.5	. 0	100.0	. 0	100.0	. 0	99.8	.1	99.1
382.5	. 0	100.0	. 0	100.0	. 0	99.8	.1	99.2
397.5 412.5	. 0	100.0	. 0	100.0	. 0	99.8 99.9	. 0	99.2 99.3
412.5	.0	100.0	.0	100.0	.0	99.9	.1	99.4
457.5	.0	100.0	.0	100.0	.0	99.9	. 2	99.6
472.5	.0	100.0	.0	100.0	.0	100.0	. 2	99.8
487.5	.0	100.0	.0	100.0	.0	100.0	.1	99.8
502.5	.0	100.0	.0	100.0	.0	100.0	.1	99.9
517.5	.0	100.0	.0	100.0	.0	100.0	.1	100.0
			. •		. •		_	

FILE NUMBER: - 149

Foray & Water 1:3 (BBN 6000) AU5000, 110 MPH 18 liters/min. 7800 RPM

PSI and Blade Angle not reported

STATISTICS

THE TABLES USE THE FOLLOWING CODE

Number = (0) Length = (1)

Area = (2)Volume = (3)

PERCENTILES um

% (0) (1) (2) (3) 10.0 13.9 18.2 36.3 62.2 15.9 15.7 22.6 48.0 73.7 25.0 18.7 31.1 62.9 86.6 50.0 28.6 61.8 92.9 116.5 75.0 56.7 95.7 126.6 155.5 84.1 75.6 112.5 146.4 177.7 90.0 91.1 128.8 164.5 201.2

DROPLET SPECTRUM PARAMETERS

NUMBER MEDIAN DIAM 28.6 microns

NUMBER AVERAGE DIAM 42.4 microns

VOLUME AVERAGE DIAM 66.1 microns

SAUTER AVERAGE DIAM 98.9 microns

VOLUME MEDIAN DIAM 116.5 microns

SPECTRUM 'WIDTH' PARAMETERS

 sigma g (0), (3)
 1.82 1.58

 SPAN (ASTM)
 139.00

 RELATIVE SPAN
 1.19

 'R' (VMD/NMD)
 4.07

DROPS/LITRE :- 6.61E+009

TOTAL RAW NO.:- 90170

SAMPLE TIME (secs):- 164

FREQUENCY AND ACCUMULATED PERCENTAGE DATA

]	Number	Lei	ngth		Area		Volume
size µm		(0)	(1)		(2)		(3)
25.5 40.4 55.2 70.1 84.9 99.6 114.3 129.2 145.2 158.9 173.4 188.3 203.0 217.8 232.5 247.5 262.5 277.5 292.5 307.5 322.5 337.5 352.5	46.3 17.8 10.1 7.6 6.3 4.6 2.9 1.1 6.4 .1 .0 .0 .0 .0 .0				5.2 6.6 7.9 10.2 12.9 13.3 11.5 8.9 7.2 4.9 3.6 2.3 1.61 .5 .5 .5 .3		.9 2.2 3.8 6.4 10.1 12.4 11.0 10.0 7.5 6.1 4.2 3.3 2.4 1.9 1.2 1.2	
367.5	. 0	100.0	.0	100.0	. 0	99.8	.1	99.4
382.5 397.5	. 0	100.0	.0	100.0 100.0	. 0	99.9 99.9	.1 .1	99.5 99.6
412.5	. 0	100.0	.0	100.0	.0	99.9	.0	99.6
427.5	. 0	100.0	. 0	100.0	.0	100.0	.1	99.8
442.5 472.5	.0	100.0	.0	100.0	.0	100.0	.1	99.8 99.9
487.5	.0	100.0	.0	100.0	.0	100.0	.1	100.0

Nozzle	Micronair AU5000	Slice Rate	4 MHz
RPM	2700	AVG	100
Spray Pressure	47 psi	DFM	1 cm.
Airspeed	100 mph	BAR	1.5
Flow Rate	3.79 gpm	Distance to Prob	e 40 cm.
Tank Mix	Gypcheck	Sample Interval	1 sec.
		Number of Sample	s 60
FILE: C:\PMS\DAT	A\02149116.000	Number of Sample	Rings 7

FILE: C:\PMS\DATA\02149116.000 Blade Angle 65 degrees

Number of Tests Combined: 3

UPPER		•	0			ACCUMU	LATED
LIMIT	N(RAW)	N/Cm ² s	Gm/M ² S	% N	% VOL.	% N	% VOL.
C1							
							
56	629	5.33E+07	17532.76	36.97	0.47	36.97	0.47
89	1412	1.71E+07	34016.24	11.87	0.91	48.84	1.38
122	1644	1.53E+07	92760.19	10.60	2.48	59.44	3.85
154	2235	1.70E+07	2.33E+05	11.82	6.23	71.26	10.08
187	2068	1.29E+07	3.34E+05	8.96	8.92	80.22	19.00
220	1465	9.09E+06	3.98E+05	6.30	10.61	86.53	29.62
252	1185	6.83E+06	4.65E+05	4.73	12.41	91.26	42.03
284	1024	5.14E+06	5.16E+05	3.56	13.78	94.83	55.81
318	835	3.35E+06	4.82E+05	2.33	12.87	97.15	68.68
351	552	1.98E+06	3.88E+05	1.38	10.36	98.53	79.04
382	323	940075	2.40E+05	0.65	6.41	99.18	85.45
414	198	548695	1.81E+05	0.38	4.82	99.56	90.27
447	115	259488	1.08E+05	0.18	2.89	99.74	93.16
479	77	148802	77141.81	0.10	2.06	99.85	95.22
512	36	105583	67096.53	0.07	1.79	99.92	97.01
545	25	41608	32032.10	0.03	0.86	99.95	97.87
578	15	41664	38472.26	0.03	1.03	99.98	98.89
611	7	16745	18354.66	0.01	0.49	99.99	99.38
644	4	16412	21157.98	0.01	0.56	100.00	99.95
677	1	1033	1553.82	0.00	0.04	100.00	99.99
710	0	201	350.09	0.00	0.01	100.00	100.00

TOTAL 1.39E+04 1.44E+08 3.75E+06

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 13852/ 21068.67 = 65.7%

NUMBER MEAN DIA.= D $_{10}$... 117.08 µm VOLUME MEAN DIA.= D $_{30}$... 170.64 µm SAUTER MEAN DIA.= D $_{32}$... 235.16 µm

VOLUME MEDIAN DIA.=DV.1... 154.18 μm DV.5... 270.89 μm DV.9... 413.12 μm

RELATIVE SPAN= 0.96

Nozzle	Micronair AU5000	Slice Rate	4 MHz
RPM	7000	AVG	100
Spray Pressure	23 psi	DFM	1 cm.
Airspeed	100 mph	BAR	1.5
Flow Rate	3.79 gpm	Distance to Probe	
Tank Mix	Gypcheck	Sample Interval	1 sec.
		Number of Samples	
FILE: C:\PMS\DATA\	02139117.000	Number of Sample	Rings 7

FILE: C:\PMS\DATA\02139117.000 Blade Angle 35 degrees

Number of Tests Combined: 3

UPPER		0	0			ACCUMU	LATED
LIMIT 6f	N(RAW)	N/Cm ² S	Gm/M ² S	% N	% VOL.	% N	% VOL.
01							
56	1173	1.32E+08	43570.05	41.09	1.29	41.09	1.29
89	1470	3.60E+07	71651.03	11.18	2.13	52.27	3.42
122	1870	4.54E+07	2.75E+05	14.07	8.18	66.34	11.60
154	3183	5.16E+07	7.07E+05	16.02	20.98	82.36	32.57
187	3826	3.36E+07	8.69E+05	10.42	25.79	92.78	58.36
220	2921	1.42E+07	6.23E+05	4.42	18.48	97.20	76.85
252	1888	5.88E+06	4.01E+05	1.83	11.90	99.02	88.75
284	1037	2.24E+06	2.25E+05	0.70	6.68	99.72	95.43
318	430	661927	95163.31	0.21	2.82	99.92	98.25
351	141	176306	34480.00	0.05	1.02	99.98	99.28
382	41	40016	10218.65	0.01	0.30	99.99	99.58
414	12	7839	2580.73	0.00	0.08	99.99	99.66
447	6	20281	8450.98	0.01	0.25	100.00	99.91
479	3	5930	3074.37	0.00	0.09	100.00	100.00
512	1	119	75.64	0.00	0.00	100.00	100.00
TOTAL	1.80E+04	3.22E+08	3.37E+06				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 18001/ 33871.33 = 53.1%

NUMBER MEAN DIA.= D₁₀.... 95.07 μ m VOLUME MEAN DIA.= D₃₀.... 125.96 μ m SAUTER MEAN DIA.= D₃₂.... 160.24 μ m

NUMBER MEDIAN DIA.=DN.1... <56 μm $D_{N.5}$... 82.57 μm $D_{N.9}$... 178.49 μm

VOLUME MEDIAN DIA.=DV.1... 115.50 μm DV.5... 176.60 μm DV.9... 257.99 μm

RELATIVE SPAN= 0.81

Nozzle RPM Spray Pressure Airspeed Flow Rate Tank Mix FILE: C:\PMS\DATA\	AUS000,45 DEG. 7300 50 psi 115 mph 1.9 gpm SAN 415 SC 32LV NEAT 05138611.000	AVG DFM BAR Distance to (val 60 sec. mples 1
Number of Tests Co	mbined:1		
UPPER LIMII N(RAW)	_N/SEC Gm/SEC	%_N %_YOL.	ACCUMULATED %_N %_YOL.
89 9159 1 122 8146 154 7294 1 187 4666	7.38E+07 2.43 2.38E+07 4.73 1.71E+07 10.40 9.80E+06 13.41 3.44E+06 8.89 1.05E+06 4.60 308263 2.10 62515 0.63 14120 0.20 1076 0.02 130 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00	57.02 5.11 18.39 9.96 13.24 21.92 7.58 28.26 2.66 18.73 0.81 9.69 0.24 4.43 0.05 1.32 0.01 0.43 0.00 0.04 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.10	57.02 5.11 75.41 15.08 88.66 37.00 96.23 65.25 98.89 83.98 99.70 93.67 99.94 98.10 99.99 99.42 100.00 99.89 100.00 99.90 100.00 99.90 100.00 99.90 100.00 99.90 100.00 99.90 100.00 99.90 100.00 99.90 100.00 99.90 100.00 99.90 100.00 99.90 100.00 100.00
TOTAL 3.88E+04	1.29E+08 47.45	-	
TOTAL ACCEPTED RAW	PARTICLES / TOTA	L IMAGES = 38827/	51000 = 76.1%
NUMBER MEAN DIA. = VOLUME MEAN DIA. = SAUTER MEAN DIA. =	D ₁₀ 67.26 µ D ₃₀ 88.85 µ D ₃₂ 115.89 µ	m m	
NUMBEP MEDIAN DIA.	D _{N.1} <56 µ =D _{N.5} <56 µ О _{N.7} 127.45 µ	m m	

VOLUME MEDIAN DIA.=DV.5... 136.79 µm DV.9... 207.39 µm

RELATIVE SPAN= 0.99

No report - data provided by Temple Bowen, Sandoz Crop Protection.

Nozzle	AU5000,45 DEG.	Slice Rate	3 MHz
RPM	6900	AVG	20000
Spray Pressure	55 psi	DFM	1 cm.
Airspeed	110 mph	BAR	1.5
Flow Rate	2.1 gpm	Distance to Probe	46 cm.
Tank Mi×	50% SAN 415 SC 32LV	Sample Interval	60 sec.
	50% WATER	Number of Samples	1
FILE: C:\PMS\DATA\C	5218614.005	Number of Sample	Rings 9

Number of Tests Combined:1

UPPER						ACCU	MULATED
TIMIT	N(RAW)	_N/SEC	Gm/SEC	<u>% N</u>	%_YOL.	<u>%_N</u>	%_VOL.
54 89 122 154 187 220 252	2951 5488 5948 6220 3346 760	2.28E+06 6.23E+07 4.63E+07 3.88E+07 1.67E+07 2.77E+06 417730	7.50 12.38 28.10 53.07 43.24 12.14 2.85	57.69 15.75 11.71 9.81 4.23 0.70	4.68 7.73 17.54 33.12 26.99 7.57 1.78	57.69 73.43 85.14 94.95 99.17 99.87	4.68 12.41 29.95 63.07 90.06 97.64 99.41
284 318 351	14 2 1	61434 8802 10002	0.62 0.13 0.20	0.02 0.00 0.00	0.39 0.08 0. 12	100.00 100.00 100.00	99.80 99.88 100.00
TOTAL	2.48E+04	3.95E+08	160.21				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 24827/ 40300 = 61.6%

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NUMBER MEAN DIA. = D10... 69.10 µm VOLUME MEAN DIA. = D30... 91.85 µm SAUTER MEAN DIA. = D32... 119.48 µm NUMBER MEDIAN DIA. = DN.1... (56 µm (56 µm (56 µm (78.5)... DN.9... 137.96 µm (56 µm (78.98 µm (78.98)... 141.58 µm (79.1)... 187.22 µm
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RELATIVE SPAN= 0.76

No report - data provided by Temple Bowen, Sandoz Crop Protection.

AU5000,6400 RPM,70 MPH,2.2 GPM,THURICIDE *

DTG 84/04/11 14:25:10

17 PSI BLADE ANGLE 35 DEGREES

DFM=1.0--2.0 MHz

UPPER						A CC U	MULATED
LIMIT	N (RAW)	N/SEC	<u>gm/SEC</u>	<u>8 N</u>	%_VOL.	<u>₹ _ N</u>	%_VOL.
56	3564	2.10E 08	6.89	62.35	5.84	62.35	5.84
89	3866	5.81E 07	11.56	17.30	9.80	79.64	15.64
122	4089	3.87E 07	23.51	11.51	19.93	91.16	35.57
154	4926	2.09E 07	28.53	6.20	24.19	97.36	59.76
187	3500	4.90E 06	12.68	1.46	10.75	98.82	70.51
219	2112	759925	3.32	0.23	2.82	99.05	73.32
252	980	237983	1.62	0.07	1.37	99.12	74.70
284	240	2.96E 06	29.76	0.88	25.23	100.00	99.93
318	51	4631	0.07	0.00	0.06	100.00	99.98
351	11	786	0.02	0.00	0.01	100.00	100.00
382	1	53	0.00	0.00	0.00	100.00	100.00
414	0	0	0.00	0.00	0.00	100.00	100.00
447	0	0	0.00	0.00	0.00	100.00	100.00
479	1	57	0.00	0.00	0.00	100.00	100.00
512	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		3.36E 08	117.95				

TOTAL RAW PARTICLES.... 23341/28947-- 80.63%

NUMBER MEAN DIAMETER... 63.45 MICROMETERS S.D.... 38.82

VOLUME MEAN DIAMETER... 87.54 MICROMETERS S.D.... 126.30

SAUTER MEAN DIAMETER... 121.27 MICROMETERS

 $D_{N0.1}$... 0.00 MICROMETERS $D_{V0.1}$... 70.26 MICROMETERS $D_{V0.5}$... 141.29 MICROMETERS $D_{V0.5}$... 1.43 $D_{V0.9}$... 118.61 MICROMETERS $D_{V0.9}$... 271.81 MICROMETERS

*Thuricide 32LV 1:1 Water

AU5000,7600 RPM,70 MPH,2.2 GPM,THURICIDE *

DTG 84/04/11 10:17:42

17 PSI
BLADE ANGLE 35 DEGREES

DFM=1.0--2.0 MHz

UPPER						ACC U	MULATED
LIMIT.	N(RAW)	N/SEC	gm/SEC	<u>₹_N</u>	%_VOL.	<u>₹ </u>	& VOL.
56	3660	1.61E 08	5.31	55.20	7.62	55.20	7.62
89	4747	7.87E 07	15.65	26.93	22.47	82.13	30.09
122	5843	3.63E 07	22.03	12.41	31.63	94.53	61.72
154	5659	1.32E 07	18.06	4.52	25.93	99.05	87.65
187	3596	2.25E 06	5.82	0.77	8.36	99.82	96.01
219	1785	361437	1.58	0.12	2.27	99.94	98.28
252	650	159383	1.09	0.05	1.56	100.00	99.84
284	125	9549	0.10	0.00	0.14	100.00	99.98
318	13	978	0.01	0.00	0.02	100.00	100.00
351	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		2.92E 08	69.65				

TOTAL RAW PARTICLES.... 26078/33467-- 77.92%

NUMBER MEAN DIAMETER... 62.42 MICROMETERS S.D.... 30.41

VOLUME MEAN DIAMETER... 76.94 MICROMETERS S.D.... 94.04

SAUTER MEAN DIAMETER... 94.48 MICROMETERS

D_{N0.9}... 109.88 MICROMETERS D_{V0.9}... 163.54 MICROMETERS

*Thuricide 32LV 1:1 Water

Reference #14

AU5000,8100 RPM,90 MPH,2.8 GPM,THURICIDE*

DTG 84/04/11 14:59:46

22 PSI BLADE ANGLE 35 DEGREES

DFM=1.0--3.0 MHz

UPPER						ACCU!	MULATED
LIMIT	N(RAW)	N/SEC	gm/SEC	<u>8 N</u>	% VOL.	8 N	%_VOL.
56	1457	2.45E 08	8.06	59.66	6.36	59.66	6.36
89	1818	8.77E 07	17.42	21.34	13.74	81.00	20.10
122	2142	4.65E 07	28.25	11.33	22.29	92.33	42.39
154	2047	2.27E 07	31.02	5.52	24.47	97.85	66.86
187	1299	3.91E 06	10.13	0.95	7.99	98.81	74.36
219	742	655014	2.86	0.16	2.26	98.97	77.12
252	272	4.23E 06	28.83	1.03	22.74	100.00	99.86
284	53	14955	0.15	0.00	0.12	100.00	99.98
318	11	2058	0.03	0.00	0.02	100.00	100.00
351	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		4.11E 08	126.76				

TOTAL RAW PARTICLES.... 9841/14707-- 66.91%

NUMBER MEAN DIAMETER... 63.08 MICROMETERS S.D.... 36.05

VOLUME MEAN DIAMETER... 83.88 MICROMETERS S.D.... 115.10

SAUTER MEAN DIAMETER... 111.79 MICROMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 65.01 MICROMETERS $D_{V0.5}...$ 131.87 MICROMETERS $D_{V0.5}...$ 131.87 MICROMETERS $D_{V0.9}...$ 238.15 MICROMETERS

^{*}Thuricide 32LV 1:1 Water

Reference #14

AU5000,8900 RPM,90 MPH,2.8 GPM,THURICIDE

DTG 84/04/11 10:40:31

22 PSI BLADE ANGLE 35 DEGREES

DFM=1.0--3.0 MHz

UPPER						ACCU	MULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>₹_N</u>	%_VOL.	<u>8_N</u>	%_VOL.
56	2616	2.08E 08	6.86	56.83	8.47	56.83	8.47
8 9	3753	9.67E 07	19.22	26.36	23.75	83.19	32.22
122	4354	4.44E 07	26.98	12.11	33.34	95.30	65.56
154	4266	1.43E 07	19.60	3,91	24.21	99.21	89.77
187	2579	2.58E 06	6.68	0.70	8.25	99.91	98.02
219	947	274564	1.20	0.07	1.48	99.98	99.50
252	250	54087	0.37	0.01	0.46	100.00	99.96
234	22	2173	0.02	0.00	0.03	100.00	99.99
318	6	720	0.01	0.00	0.01	100.00	100.00
351	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		3.67E 08	80.93				

TOTAL RAW PARTICLES.... 18793/25208-- 74.55%

NUMBER MEAN DIAMETER... 61.19 MICROMETERS S.D.... 29.34

VOLUME MEAN DIAMETER... 75.00 MICROMETERS S.D.... 90.41

SAUTER MEAN DIAMETER... 91.61 MICROMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 58.39 MICROMETERS $D_{N0.5}...$ 0.00 MICROMETERS $D_{V0.5}...$ 106.53 MICROMETERS $D_{V0.9}...$ 155.18 MICROMETERS

*Thuricide 32LV 1:1 Water

AU5000,150 MPH,5.7 GPM,3 PARTS THURICIDE 32LV,1 PART WATER, 8000 RPM

DTG 85/05/07 00:31:00

BLADE ANGLE 45 DEGREES

DFM=1.0--4.0 MHz

UPPER						ACCU	1ULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	%_N	%_VOL.	<u>₹ N</u>	% VOL.
56	1199	2.51E 08	8.25	53.70	4.76	53.70	4.76
89	3834	9.15E 07	18.19	19.59	10.48	73.29	15.24
122	5262	6.83E 07	41.46	14.61	23.89	87.91	39.13
154	48 96	4.08E 07	55.81	8.73	32.16	96.64	71.29
187	2041	1.23E 07	31.93	2.64	18.40	99.28	89.69
219	543	2.53E 06	11.07	0.54	6.38	99.82	96.07
252	154	641426	4.37	0.14	2.52	99.96	98.59
284	42	129751	1.30	0.03	0.75	99.98	99.34
318	12	65787	0.95	0.01	0.54	100.00	99.89
351	2	10139	0.20	0.00	0.11	100.00	100.00
382	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		4.67E 08	173.53				

TOTAL RAW PARTICLES.... 17985/30602-- 58.77%

NUMBER MEAN DIAMETER... 68.98 MICROMETERS S.D.... 38.62

VOLUME MEAN DIAMETER... 89.22 MICROMETERS S.D.... 110.48

SAUTER MEAN DIAMETER... 113.62 MICROMETERS

D_{V0.1}... 72.77 MICROMETERS D_{N0.1}... 0.00 MICROMETERS

D_{V0.5}... 132.76 MICROMETERS R.S.... 0.87 D_{N0.5}... 0.00 MICROMETERS

DV0.9... 188.53 MICROMETERS D_{NO.9}... 129.52 MICROMETERS

Airspee Flow Ra Tank Mi	te ×	7600 60 psi 115 mph 2.2 gpm THURICIO	DE 48LV,NE	EAT Same	ance to lole Inter- per of Sam per of Sam	val 60 mples 1	cm. cm. sec.
Number	of Tests (Combined:1					
UPPER Limii	N(RAW)	_N/SEC	Gm/SEC	<u>%_N</u>	%_YQL.	ACCUM <u>%_N</u>	1ULATED %_YQL.
56 89 122 154 187 220	8447 16056 16648 6793 856 74	1.65E+08 4.35E+07 2.10E+07 5.15E+06 589061 49061	5.42 8.64 12.78 7.05 1.52 0.21	70.10 18.48 8.95 2.19 0.25 0.02	15.16 24.15 35.72 19.70 4.26 0.60	70.10 88.58 97.53 99.72 99.97	15.16 39.31 75.04 94.74 99.00 99.60

Slice Rate

3 MH:

AU5000,35 DEG.

TOTAL 4.89E+04 2.35E+08 35.77

12334

2420

1146

446

0

14

2

1

1

Nozzle

252

284

318

351

362

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 48892/ 54900 = 89.1%

0.08

0.02

0.01

0.00

0.23

0.01

0.00

0.00

0.00

0.00

0.23

0.07

0.02

0.00

0.08

100.00

100.00

100.00

100.00

100.00

99.83

99.90

99.92

99.92

100.00

NUMBER MEAN DIA.= D_{10} ... 54.18 μ m VOLUME MEAN DIA.= D_{30} ... 66.26 μ m SAUTER MEAN DIA.= D_{32} ... 81.50 μ m

D_{N.1}... <56 µm NUMBER MEDIAN DIA.=D_{N.5}... <56 µm D_{N.9}... 94.17 µm

ОV.1... (56 µm VOLUME MEDIAN DIA.=DV.5... 98.81 µm DV.9... 146.67 µm

RELATIVE SPAN= 0.99 Extrapolated

No report - data provided by Temple Bowen, Sandoz Crop Protection.

AU5000,110 MPH,1.6 GPM,1 PART THURICIDE 48LV,2 PARTS WATER

		וח	FM=1.04.	0 MH 2		ANGLE 55	DEGREES	
		<i>D</i> .	M-1.0 4.	O MIZ	4600 1	RPM		
UPPER						ACCU!	MULATED	
LIMIT	N (RAW)	N/SEC	qm/SEC	8 N	% VOL.	8 N	%_VOL.	
56	5120	5.16E 07	1.70	46.72	2.76	46.72	2.76	
8 9	13251	1.95E 07	3.88	17.70	6.32	64.42	9.08	
122	15292	1.82E 07	11.07	16.52	18.02	80.95	27.10	
154	14110	1.27E 07 6.02E 06	17.33	11.48	28.20	92.43	55.30	
187	10995	6.02E 06	15.59	5.45	25.36	97.88	80.67	
219	5256	1.82E 06	7.98	1.65	12.98	99.53	93.65	
252	1550	422873	2.88	0.38	4.69	99.92	98.33	
284	324	77170 11785	0.78	0.07	1.26	99.99	99.59	
318	61	11785	0.17	0.01	0.28	100.00	99.87	
351	6	3497 444 0	0.07	0.00	0.11	100.00	99.98	
382	2	444	0.01	0.00	0.02		100.00	
414	0	0	0.00	0.00	0.00	100.00	100.00	
TOTALS		1.10E 08	61.46					
TOTAL R	AW PARTI	CLES	65967/8404	9 78.4	9%			
NUMBER	MEAN DIA	METER	78.37 MICE	ROMETERS	S.D	45.52		
UOT IME	MEAN DIA	METER 1	00 11 MTCT	ONEMEDO	c n	122 04		
VOLUME	MEAN DIA	METER I	UZ.11 MICE	COMETERS	5.0	122.04		
SAUTER	MEAN DIA	METER 1	29.62 MICE	ROMETERS				
D _N O. 1	. 0.00	MICROMETE	RS Dvn	1 90	.62 MICRO	METERS		
		MICROMETE	RS D	148	.40 MICRO	METERS	R.S.	0.81
			, , ,	•				
DM0.3	. 147.63	MICROMETE	p_{V0}	9 210	.68 MICRO	PETERS		

DTG 85/05/17 04:22:00

Reference #9

AU5000,150 MPH,5.7 GPM.1 PART THURICIDE 48LV,1 PART WATER

		DTG	85/05/08	12:24:00		PSI	
		D	FM=1.04	.0 MHz		DE ANGLE 4 00 RPM	45 DEGREES
UPPER							MULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>₹ N</u>	%_VOL.	<u>8 </u>	%_VOL.
56	1062	2.87E 08	9.42	56.19	4.91	56.19	4.91
8 9	3280	9.53E 07	18.94	18.68	9.87	74.88	14.79
122	4002	6.84E 07 4.11E 07 1.31E 07	41.54	13.41	21.66	88.29	36.44
154	3628	4.11E 07	56.20	8.06	29.30	96.35	65.74
187	1316	1.31E 07	33.99	2.57	17.72	98.92	83.46
219	343	3.82E 06	16.70	0.75	8.71	99.67	92.17
252	7 8	1.00E 06 478807	6.83	0.20	3.56	99.87	95.73
284	32	478807	4.81	0.09	2.51	99.96	98.24
318	4	157060	2.26 0.83 0.00	0.03	1.18	99.99	99.41
351	3	42500	0.83	0.01	0.43	100.00	99.85
382	3 0 1	0	0.00	0.00	0.00	100.00	99.85
414	1	8827	0.29	0.00	0.15	100.00	100.00
447	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		5.10E 08					
ŤOTAL F	RAW PARTI	CLES	13749/253	11 54.3	2 %		
NUMBER	MEAN DIA	METER	67.82 MIC	ROMETERS	S.D	39.40	
VOLUME	MEAN DIA	METER	89.59 MIC	ROMETERS	S.D	116.47	
SAUTER	MEAN DIA	METER 1	16.89 MIC	ROMETERS			
D _{N0.1}	0.00	MICROMETE MICROMETE	RS D_{V0}	.1··· 73	.27 MICRO	METERS METERS	R.S 1.01

D_{V0.9}... 211.72 MICROMETERS

D_{N0.9}... 128.61 MICROMETERS

Reference #10

Nozzle RPM Sprav Airspe Flow R Tank M	Pressure ed Rate	8000 25 psi 115 mph 1.5 gpm	25 psi 115 mph		e Rate ance to le Inter er of Sa	20 1 1. Probe 46 val 60	sec.
FILE:	C:\PMS\DATA	1\05138615.0	00		per of Sa		
Number	of Tests C	Cambined:1					
UPPER LIMIT	N(RAW)	_N/SEC	<u>Gm/SE</u> C	<u>% _ N</u>	%_YOL.	ACCU %_N	MULATED %_YQL.
56 87 122 154 187 220 252 284	7281 10047 8391 4960 845 76 9	1.92E+07	3.82	0.59 0.06	13.43 17.32 29.62 28.90 8.68 1.49 0.46	87.05 95.63 99.34	30.75 60.37 89.27 97.94 99.43 99.89
TOTAL	3.16E+04	1.26E+08	22.06				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 31610/ 42450 = 74.5%

NUMBER MEAN DIA.= D 10 ... 54.91 μ m VOLUME MEAN DIA.= D 30 ... 69.53 μ m SAUTER MEAN DIA.= D 32 ... 88.58 μ m

NUMBER MEDIAN DIA.= $D_{N.5}$... (56 µm $D_{N.9}$... 100.29 µm

VOLUME MEDIAN DIA. = DV.1... 110.39 µm DV.9... 157.09 µm

RELATIVE SPAN= 0.97 Extrapolated

No report - data provided by Temple Bowen, Sandoz Crop Protection.

RPM		7100		AVG		2000	0
Spray Pre	essure	30 psi		DFM		1 ⊂ m	٠.
Airspeed		110 mph		BAR		1.5	
Flow Rate	е	1.6 gpm		Dista	ance to Pr	obe 46 c	m.
Tank Mix		25% THUR 75% WATE	ICIDE 64L\ R		le Interva er of Samp		ec.
FILE: C:	\PMS\DATA\C	15208614.0	01	Numbe	er of Samp	le Rings	9
Number o	f Tests Com	bined:1					
UPPER						ACCUML	LATED
LIMIT	N(RAW)	_N/SEC	Gm/SEC	<u>% _ N</u>	<u>%_</u> VQL.	<u>%_N</u>	<u>%_YOL.</u>

Slice Rate

3 MH=

AU5000,45 DEG.

3.35 56 3885 1.02E+08 63.64 9.32 63.64 9.32 89 9218 6.28 19.76 17.48 3.16E+07 83.40 26.80 122 8960 1.73E+07 10.52 29.29 94.24 56.09 10.84 154 8093 7.25E+06 9.93 4.54 27.64 98.78 83.73 4.38 12.19 99.83 187 3684 1.69E+D6 1.06 95.92 220 545 207417 0.91 0.13 2.53 99.96 98.45 252 0.22 99.98 99.06 45 32318 0.02 0.61 0.09 0.25 99.99 284 6 9046 0.01 99.31 2 318 12667 0.18 0.01 0.51 100.00 99.82 2 351 3329 0.07 0.00 0.18 100.00 100.00

TOTAL 3.44E+04 35.92 1.60E+08

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 34440/ 35510 = 97.0%

D₁₀.... D₃₀.... D₃₂.... 59.43 µm 75.46 µm NUMBER MEAN DIA .= VOLUME MEAN DIA .= SAUTER MEAN DIA . = 95.73 µm

NUMBER MEDIAN DIA.= $D_{N.5}^{D}$... (56 µm $D_{N.9}^{D}$... 105.04 µm

VOLUME MEDIAN DIA. = DV.5... 115.08 µm DV.9... 171.27 µm

RELATIVE SPAN= 0.99

Nozzle

No report - data provided by Temple Bowen, Sandoz Crop Protection.

Nozzle	Micronair AU5000	Slice Rate	4 MHz
RPM	11000	AVG	100
Spray Pressure	23 psi	DFM	1 cm.
Airspeed	135 mph	BAR	1.5
Flow Rate	2.55 gpm	Distance to Probe	40 cm.
Tank Mix	TM Biocontrol	Sample Interval	1 sec.
		Number of Samples	60
FILE: C:\PMS\DATA	02129112.000	Number of Sample	Rings 7

FILE: C:\PMS\DATA\02129112.000 Blade Angle 35 degrees

Number of Tests Combined: 1

UPPER	• •					ACCUM	ILATED
LIMIT	N(RAW)	N/Cm ² s	Gm/M ² S	% N	% VOL.	% N	% VOL.
56	1110	1.42E+08	46854.44	59.98	7.20	59.98	7.20
89	2944	4.67E+07	92750.31	19.65	14.25	79.63	21.45
122	3718	2.94E+07	1.78E+05	12.37	27.41	92.00	48.87
154	2597	1.49E+07	2.04E+05	6.29	31.42	98.29	80.28
187	640	2.98E+06	77045.07	1.25	11.84	99.55	92.12
220	81	983578	43032.71	0.41	6.61	99.96	98.73
252	15	68198	4646.66	0.03	0.71	99.99	99.45
284	5	24441	2455.05	0.01	0.38	100.00	99.83
318	2	78	11.21	0.00	0.00	100.00	99.83
351	0	0	0.00	0.00	0.00	100.00	99.83
382	1	32	8.27	0.00	0.00	100.00	99.83
414	1	107	35.27	0.00	0.01	100.00	99.83
447	0	0	0.00	0.00	0.00	100.00	99.83
479	1	2080 .	1078.09	0.00	0.17	100.00	100.00
TOTAL 1	.11E+04	2.37E+08	6.51E+05				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 11113/ 30086.67 = 36.9%

NUMBER MEAN DIA.= D₁₀... 62.84 μ m VOLUME MEAN DIA.= D₃₀... 80.62 μ m SAUTER MEAN DIA.= D₃₂... 102.72 μ m NUMBER MEDIAN DIA.=D_{N.5}... <56 μ m D_{N.9}... 116.60 μ m VOLUME MEDIAN DIA.=D_{V.1}... 62.75 μ m VOLUME MEDIAN DIA.=D_{V.1}... 62.75 μ m

VOLUME MEDIAN DIA.=DV.1... 62.75 µm DV.5... 122.79 µm DV.9... 181.39 µm

RELATIVE SPAN= 0.97
Reference #2

AU5000, 50 MPH, 3750 RPM, 0.6 GPM, WATER

DIG 83/10/10 02:13:14

DFM=1.0--1.5 MHz

30 PSI BLADE ANGLE 35 DEGREES

UPPER						ACC U	MULATED
LIMIT	M(RAW)	MZEC	<u>qm/SEC</u>	8 11	&_VOL.	<u>8_N</u>	S VOL.
56	3662	3.70E 07	1.22	67.16	3.00	67.16	3.00
89	5744	7.35E 06	1.46	13.34	3.60	80.50	6.59
122	5843	4.21E U6	2.56	7.64	6.29	88.13	12.88
154	3975	2.06E 06	2.82	3.74	6.93	91.87	19.81
187	2339	898698	2.33	1.63	5.73	93.50	25.54
219	1564	571236	2.50	1.04	6.15	94.54	31.69
252	3130	1.23E 06	8.39	2.23	20.64	96.77	52.33
284	4404	1.56E 06	15.67	2.83	38.57	99.60	90.90
318	734	160063	2.30	0.29	5.66	99.89	96.56
351	188	37225	0.73	0.07	1.79	99.96	98.35
382	40	12879	0.33	0.02	0.81	99.98	99.16
414	12	6048	0.20	0.01	0.49	99.99	99.65
447	3	2029	0.08	0.00	0.21	100.00	99.86
479	1	1049	0.05	0.00	0.13	100.00	99.99
512	0	0	0.00	0.00	0.00	100.00	99.99
5 4 5	0	0	0.00	0.00	0.00	100.00	99.99
578	0	0	0.00	0.00	0.00	100.00	99.99
611	1	31	0.00	0.00	0.01	100.00	100.00
644	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		5.51E 07	40.64				

TOTAL RAW PARTICLES.... 31640/36010-- 87.86%

NUMBER MEAN DIAMETER... 68.52 MICROMETERS S.D... 56.45

VOLUME MEAN DIAMETER... 112.13 MICROMETERS S.D.... 162.37

SAUTER MEAN DIAMETER... 178.85 MICROMETERS

$D_{N0.1}$	0.00	MICROMETERS			MICROMETERS		
D _{N0.5}	0.00	MICROMETERS	D _{V0.5}	248.73	MICROMETERS	R.S	0.71
D _{N0.9}	138.08	MICROMETERS	Dv0.9	284.02	MICROMETERS		

Reference #4

AU5000, 50 MPH, 4100 RPM, 3.0 GPM, WATER

DTG 83/10/11 11:11:35

20 PSI

DFM=1.0--1.5 MHz

BLADE ANGLE 35 DEGREES

UPPER						ACCU:	MULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>8 N</u>	%_VOL.	<u>₹ 7</u> 3	%_VOL.
56	1471	6.65E 07	2.19	53.80	1.02	53.80	1.02
89	2716	1.54E 07	3.06	12.46	1.42	66.26	2.44
122	2679	1.27E 07	7.71	10.28	3.59	76.54	6.03
154	2259	1.01E 07	13.77	8.15	6.42	84.69	12.45
187	1441	5.52E 06	14.29	4.47	6.66	89.16	19.10
219	952	3.33E 06	14.56	2.70	6.78	91.85	25.38
252	744	2.78E 06	18.97	2.25	8.83	94.11	34.72
284	628	1.64E 06	16.45	1.33	7.56	95.43	42.38
318	779	1.59E 06	24.31	1.37	11.32	96.80	53.71
351	1248	2.10E 06	41.11	1.70	19.15	98.50	72.86
382	719	1.11E 06	28.25	0.90	13.16	99.40	36.01
414	412	386034	12.71	0.31	5.92	99.71	91.93
447	20 7	250146	10.42	0.20	4.86	99.92	96.79
479	71	58865	3.05	0.05	1.42	99.96	98.21
512	27	25356	1.61	0.02	0.75	99.98	98.98
545	16	8987	0.69	0.01	0.32	99.99	99.28
578	9	4289	0.40	0.00	0.18	99.99	99.47
611	5	1729	0.19	0.00	0.09	100.00	99.56
644	4	1389	0.18	0.00	0.08	100.00	99.64
677	5	2650	0.40	0.00	0.19	100.00	99.82
710	0	0	0.00	0.00	0.00	100.00	99.82
743	0	0	0.00	0.00	0.00	100.00	99.82
776	2	347	0.08	0.00	0.04	100.00	99.86
809	0	0	0.00	0.00	0.00	100.00	99.86
842	0	0	0.00	0.00	0.00	100.00	99.86
875	2	901	0.30	0.00	0.14	100.00	100.00
908	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.24E 08	214.70				

TOTAL RAW PARTICLES.... 16396/20274-- 80.87%

NUMBER MEAN DIAMETER... 90.02 MICROMETERS S.D.... 78.20

VOLUME MEAN DIAMETER... 149.23 MICROMETERS S.D.... 215.08

SAUTER MEAN DIAMETER... 233.72 MICROMETERS

O_{NO.1}... 0.00 MICROMETERS D_{VO.1}... 142.01 MICROMETERS

P_{N0.5}... 0.00 MICROMETERS D_{V0.5}... 306.49 MICROMETERS R.S.... 0.86

D_{N0.9}... 197.25 MICROMETERS D_{V0.9}... 404.20 MICROMETERS

Reference #4

AU5000, 100 MPH, 4200 RPM, 3.0 GPM, WATER

DTG 84/01/11 14:52:39

30 PSI

BLADE ANGLE 55 DEGREES

DFM=1.0--3.0 MHz

UPPER						AC CUN	MULATED			
LIMI'T	N(RAW)	N/SEC	qm/SEC	$\bar{s} - \bar{N}$	%_VOL.	8 N	% VOL.			
56	2614	2.34E 08	7.70	68.51	4.07	68.51	4.07			
83	3696	4.33E 07	8.60	12.65	4.54	81.16	8.61			
122	2 5 2 7	1.94E 07	11.75	5.66	6.21	86.82	14.82			
154	2730	1.75E 07	23.87	5.11	12.61	91.93	27.44			
187	2391	1.16E 07	29.93	3.38	15.81	95.31	43.25			
219	2645	7.29E 06	31.86	2.13	16.83	97.44	60.08			
252	3957	5.35E 06	36.47	1.57	19.27	99.01	79.35			
284	2 30 7	2.46E 06	24.72	0.72	13.06	99.73	92.41			
318	431	775410	11.15	0.23	5.89	99.96	98.30			
351	84	119357	2.34	0.03	1.23	99.99	99.54			
382	23	28616	0.73	0.01	0.39	100.00	99.92			
414	9	3787	0.12	0.00	0.07	100.00	99.99			
447	2	500	0.02	0.00	0.01	100.00	100.00			
479	2	57	0.00	0.00	0.00	100.00	100.00			
512	0	0	0.00	0.00	0.00	100.00	100.00			
TCTALS		3.42E 08	189.26							
TOTAL RAW PARTICLES 23418/33687 69.52%										

NUMBER MEAN DIAMETER... 65.93 MICROMETERS S.D.... 49.97

VOLUME MEAN DIAMETER... 101.92 MICROMETERS S.D.... 145.31

SAUTER MEAN DIAMETER... 154.68 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 96.31 MICROMETERS D_{V0.5}... 200.18 MICROMETERS R.S.... 0.91 D_{N0.5}... 0.00 MICROMETERS DNO.9... 142.14 MICROMETERS DVO.g... 278.70 MICROMETERS

Reference #4

Nozzle	Micronair AU5000	Slice Rate	4 MHz
RPM	7000	AVG	100
Spray Pressure	23 psi	DFM	1 cm.
Airspeed	100 mph	BAR	1.5
Flow Rate	3.79 gpm	Distance to Probe	40 cm.
Tank Mix	Water	Sample Interval	1 sec.
		Number of Samples	60
FILE: C:\PMS\DATA\C	02139116.400	Number of Sample	Rings 7

FILE: C:\PMS\DATA\02139116.400 Blade Angle 35 degrees

Number of Tests Combined: 7

UPPER						ACCUMU	LATED
LIMIT ÖÄ	N(RAW) 	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.
56	1254	6.14E+10	2020.78	43.65	1.77	43.65	1.77
89	1706	1.65E+10	3289.09	11.76	2.88	55.41	4.65
122	2731	2.09E+10	12703.15	14.87	11.11	70.28	15.76
154	5017	2.23E+10	30465.50	15.82	26.66	86.10	42.42
187	6117	1.41E+10	36407.64	10.00	31.86	96.10	74.27
220	3336	4.12E+09	18006.05	2.92	15.75	99.02	90.03
252	1178	1.02E+09	6964.88	0.73	6.09	99.75	96.12
284	344	2.50E+08	2516.01	0.18	2.20	99.92	98.32
318	63	6.97E+07	1001.93	0.05	0.88	99.97	99.20
351	18	1.86E+07	363.92	0.01	0.32	99.99	99.52
382	10	7.45E+06	190.34	0.01	0.17	99.99	99.68
414	4	1.03E+07	340.09	0.01	0.30	100.00	99.98
447	2	90909	3.79	0.00	0.00	100.00	99.98
479	1	349038	18.09	0.00	0.02	100.00	100.00
TOTAL	2.18E+04	1.41E+11	1.14E+05				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 21781/ 34683 = 62.8%

NUMBER MEAN DIA.= D $_{10}$... 88.71 µm VOLUME MEAN DIA.= D $_{30}$... 115.80 µm SAUTER MEAN DIA.= D $_{32}$... 145.53 µm NUMBER MEDIAN DIA.=D $_{N.1}$... <56 µm D $_{N.5}$... 74.09 µm D $_{N.9}$... 167.18 µm

VOLUME MEDIAN DIA.=DV.1... 104.84 μ m DV.5... 162.16 μ m DV.9... 219.84 μ m

RELATIVE SPAN= 0.71

AU5000, 100 MPH, 8000 RPM, 3.0 GPM, WATER

DTG 83/10/06 03:04:13

20 PSI

BLADE ANGLE 35 DEGREES

DFM=1.0--3.0 MHz

UPPER						ACCU!	TULATED
LIMIT	N(RAW)	NZEC	qm/SEC	8-7	%_VOL.	8 11	3 VOL.
56	1586	3.04E 08	9.98	66.93	9.96	66.93	9.96
89	3407	7.73E 07	15.36	17.04	15.33	83.97	25.29
122	4614	4.60E 07	27.94	10.14	27.88	94.11	53.17
154	4935	2.11E 07	28.83	4.65	28.76	98.76	81.92
137	2327	4.16E 06	10.77	0.92	10.74	99.67	92.67
219	346	1.24E 06	5.43	0.27	5.42	99.95	93.08
252	170	180125	1.23	0.04	1.22	99.99	99.31
284	8	58809	0.59	0.01	0.59	100.00	99.90
318	3	679.3	0.10	0.00	0.10	100.00	100.00
351	1	210	0.00	0.00	0.00	100.00	100.00
382	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		4.54E 08	100.23				

TOTAL RAW PARTICLES.... 18397/25852-- 71.16%

NUMBER MEAN DIAMETER... 58.27 MICROMETERS S.D.... 31.16

VOLUME MEAN DIAMETER... 75.04 MICROMETERS S.D.... 97.26

SAUTER MEAN DIAMETER... 96.76 MICROMETERS

 $D_{N0.1}$... 0.00 MICROMETERS $D_{V0.1}$... 56.35 MICROMETERS $D_{V0.5}$... 118.19 MICROMETERS R.S.... 1.04

D_{N0.9}... 108.56 MICROMETERS D_{V0.9}... 179.08 MICROMETERS

Reference #4

AU5000, 100 MPH, 9100 RPM, 0.6 GPM, WATER

DTG 83/10/07 01:47:03

30 PSI

BLADE ANGLE 35 DEGREES

DFM=1.0--3.0 MHz

UPPER						ACCU:	1ULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	8 11	% VOL.	8 N	& VOL.
56	5203	7.59€ 07	2.50	66.38	10.25	66.38	10.25
89	8733	1.72E 07	3.42	15.03	14.02	81.40	24.27
122	15404	1.60E 07	9.74	14.03	39.99	95.44	64.26
154	4997	4.16E 06	5.69	3.64	23.34	99.07	87.61
187	9 3 7	947686	2.45	0.83	10.07	99.90	97.68
219	123	93626	0.41	0.08	1.68	99.98	99.36
252	11	11289	0.08	0.01	0.32	99.99	99.68
284	4	7856	0.08	0.01	0.32	100.00	100.00
318	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.14E 08	24.36				

TOTAL RAW PARTICLES.... 35412/43565-- 81.29%

NUMBER MEAN DIAMETER... 58.66 MICROMETERS S.D.... 30.37

VOLUME MEAN DIAMETER... 74.13 MICROMETERS S.D.... 91.81

SAUTER MEAN DIAMETER... 93.36 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 0.00 MICROMETERS

D_{N0.5}... 0.00 MICROMETERS D_{V0.5}... 110.17 MICROMETERS R.S.... 0.96*

 $D_{N0.9}...$ 109.15 MICROMETERS $D_{V0.9}...$ 162.12 MICROMETERS

^{*}Values estimated by extrapolation.

Reference #4

AU5000, 130 MPH, 10850 RPM, 3.0 GPM, WATER

DTG 83/10/11 09:57:11

20 PSI

BLADE ANGLE 35 DEGREES

DFM=1.0--4.0 MHz

UPPER						ACCU'	1ULATED
<u>LIMIT</u>	N(RAW)	N/SEC	qm/SEC	3 N	& VOL.	8 7	& VOL.
56	2201	2.13E 08	7.02	79.33	27.40	79.33	27.40
39	5440	4.20E 07	8.35	15.62	32.61	94.95	60.01
122	5426	1.15E 07	6.96	4.26	27.19	99.21	37.20
154	2015	1.82E 06	2.49	0.68	9.71	99.89	96.91
187	171	293450	0.76	0.11	2.97	100.00	99.87
219	14	7410	0.03	0.00	0.13	100.00	100.00
252	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		2.69E 08	25.62				

TOTAL RAW PARTICLES.... 15267/22659-- 67.38%

NUMBER MEAN DIAMETER... 48.46 MICROMETERS S.D.... 18.90

VOLUME MEAN DIAMETER... 56.67 MICROMETERS S.D.... 70.70

SAUTER MEAN DIAMETER... 67.27 MICROMETERS

 $D_{N0.1}$... 0.00 MICROMETERS $D_{V0.1}$... 0.00 MICROMETERS $D_{V0.5}$... 79.13 MICROMETERS R.S.... 1.2*

DNO.9... 78.81 MICROMETERS DVO.9... 131.12 MICROMETERS

^{*}Values estimated by extrapolation.

Reference #4

AU5000, 130 MPH, 11700, 0.6 GPM, WATER

Drg 83/10/10 03:03:41

30 PSI

DFM=1.0--4.0 MHz

BLADE ANGLE 35 DEGREES

UPPER						A CC U^	ULATED	
LIMIT	N(RAW)	N\ZEC	qm/SEC	<u>8 11</u>	%_VOL.	<u>8 N</u>	3_VOL.	
56	2650	4.59€ 07	1.51	70.09	19.51	70.09	19.51	
89	8720	1.56E 07	3.10	23.82	40.08	93.92	59.60	
122	4121	3.45E 06	2.09	5.27	27.10	99.19	86.70	
154	790	364021	0.50	0.56	6.44	99.74	93.14	
187	75	142245	0.37	0.22	4.77	99.96	97.91	
219	9	6240	0.03	0.01	0.35	99.97	98.26	
252	5	18459	0.13	0.03	1.63	100.00	99.89	
284	0	0	0.00	0.00	0.00	100.00	99.39	
318	0	0	0.00	0.00	0.00	100.00	99.89	
351	0	0	0.00	0.00	0.00	100.00	99.89	
382	0	0	0.00	0.00	0.00	100.00	99.89	
414	0	0	0.00	0.00	0.00	100.00	99.89	
447	0	0	0.00	0.00	0.00	100.00	99.89	
479	1	170	0.01	0.00	0.11	100.00	130.00	
512	0	0	0.00	0.00	0.00	100.00	100.00	
TOTALS		6.54E 07	7.73					
TOTAL R	AW PARTI	CLES	16371/1960	07 83.5	8 0 %			
NUMBER	MEAN DIA	METER	51.89 MICE	ROMETERS	S.D	20.90		
OLUME	MEAN DIA	METER	60.90 MIC	ROMETERS	S.D	78.20		

D_{V0.1}... 0.00 MICROMETERS

DV0.9... 138.52 MICROMETERS

D_{V0.5}... 81.37 MICROMETERS R.S.... 1.1*

*Values estimated by extrapolation.

D_N0.1··· 0.00 MICROMETERS

D_{N0.5}... 0.00 MICROMETERS

D_{NO.9}... 83.84 MICROMETERS

SAUTER MEAN DIAMETER... 72.17 MICROMETERS

Reference #4

	Nozzle	Micronair AU5000	Slice Rate	4 MHz
•	RPM	11000	AVG	0
	Spray Pressure	23 psi	DFM	1 cm.
	Airspeed	135 mph	BAR	1.5
	Flow Rate	2.55 gpm	Distance to Probe	40 cm.
	Tank Mix	Water	Sample Interval	1 sec.
			Number of Samples	60
	FILE: C:\PMS\DATA\O	2119117.500	Number of Sample I	Rings 7

FILE: C:\PMS\DATA\02119117.500 Blade Angle 35 degrees

Number of Tests Combined: 7

UPPER LIMIT ½0	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	ACCUMU % N	LATED % VOL.
56	2423	7.92E+10	2605.42	68.67	12.08	68.67	12.08
89	4373	2.10E+10	4181.54	18.24	19.39	86.90	31.48
122	6305	1.01E+10	6102.79	8.71	28.30	95.62	59.78
154	5178	4.16E+09	5692.42	3.61	26.40	99.22	86.18
187	942	5.27E+08	1364.94	0.46	6.33	99.68	92.51
220	64	3.62E+08	1585.62	0.31	7.35	100.00	99.86
252	8	3.38E+06	23.00	0.00	0.11	100.00	99.97
284	1	711662	7.15	0.00	0.03	100.00	100.00
ΤΩΤΑΙ 1	935+04	1 155±11 (21562 87				

TOTAL 1.93E+04 1.15E+11 21562.87

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 19294/ 42014 = 45.9%

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NUMBER MEAN DIA.= D_{10}.... 56.07 µm VOLUME MEAN DIA.= D_{30}... 70.97 µm SAUTER MEAN DIA.= D_{32}... 90.39 µm NUMBER MEDIAN DIA.=D_{N.5}... <56 µm D_{N.9}... 100.67 µm VOLUME MEDIAN DIA.=D_{V.5}... 110.54 µm D_{V.9}... 174.23 µm
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RELATIVE SPAN= 1.10

Extrapolated

Droplet Spectra for Micronair AU5000 rotary atomizer atomizing a tank mix of MnS0 $_4$, Rhodamine BX, Nalco-Trol, and water. (10 lbs. MnS04 + 48 oz Rh BX dye + 3 oz Nalco-Trol per 100 gal water)

Blade Ang	d te × :\PMS\DATA zle	AUSDDD 5575 5D psi 95 mph 5.9 mph 1D# Mn, 100 GAL A\10028515.0 40 degree	202	AVG DFM BAR Dist / Samp Numb	e Rate ance to f le Inter- er of Same	20 1 : 1.9 Probe 32 val 60 mples 1	em. sec.
UPPER LIMIT	N(RAW)	_N/SEC	Gm/SEC	<u>%_N</u>	%_YOL.	ACCUI %_N	MULATED %_YOL.
56 89 122 154 187 2252 284 318 351 381 414 479 512 5478 611 677	8705 9742 8710 9762 9960 8141 6587 4594 1970 939 541 313 208 136 91 33 27 11 0	2.37E+08 6.07E+07 5.19E+07 4.13E+07 2.39E+07 1.19E+06 3.38E+06 1.18E+06 494299 233360 126749 75309 40484 30431 7428 7641 1370 4974 234 180	7.81 12.07 31.53 56.58 61.77 52.27 42.78 33.92 16.98 9.67 5.96 4.17 3.14 2.10 1.93 0.57 0.71 0.15 0.64 0.03	54.06 13.83 11.83 9.42 5.44 2.72 1.43 0.77 0.27 0.11 0.05 0.01 0.01 0.01 0.00 0.00	2.26 3.50 9.14 16.41 17.91 15.16 12.41 9.84 4.92 2.80 1.73 1.21 0.91 0.56 0.17 0.20 0.19 0.01	54.06 67.90 79.72 89.14 94.58 97.30 98.73 99.50 99.77 99.88 99.93 99.96 99.98 100.00 100.00 100.00	2.26 5.77 14.91 31.32 49.23 64.39 76.80 86.64 91.56 94.36 97.30 98.21 98.82 99.55 99.75 99.75 99.79 99.99
	.05E+04		344.81		70/7/	64664	70 74
		= D _{1D} = D _{3D} = D _{3D}		IMAGES =	. (U4/4/	76724 =	12.1%
		A .=DN .1 · · · · · · · · · · · · · · · · · ·		REL	ATIVE SPAN	= 1.07	
VOLUME	MEDIAN DI	A.=DV.1	104.22 µm 188.57 µm				

DV.9... 3D6.85 μm

Airspee Flow Ra Tank Mi FILE: C Blade A	te	Undilu .07029009 .35 de	si oh ppm oray 48B (ted) (000 egrees	Slic AVG DFM BAR Dis Sam Numl	sec.		
UPPER						ACCUN	(ULATED
LIMIT f>	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.		% VOL.
56 89 122 154 187 220 252 284 318 351 382 414 447 479	6755 9139 6905 8416 3686 482 136 68 39 25 13 5	4.36E+07 1.36E+07 8.04E+06 5.64E+06 1.40E+06 221366 70812 22375 8012 5908 5552 1221 236 103	2.71 4.88 7.72 3.61 0.97 0.48 0.22 0.12 0.12 0.14 0.04 0.01	60.01 18.78 11.07 7.77 1.92 0.30 0.10 0.03 0.01 0.01 0.01 0.00 0.00	6.39 12.08 21.73 34.37 16.07 4.31 2.15 1.00 0.51 0.51 0.63 0.18 0.04 0.02	60.01 78.79 89.85 97.62 99.54 99.94 99.97 99.98 99.99 100.00 100.00	6.39 18.46 40.19 74.57 90.64 94.95 97.09 98.10 98.61 99.12 99.75 99.93 99.98 100.00
	CCEPTED RAV			IMAGES :	= 35671/	49583.33	3 = 71.9%
VOLUME	MEAN DIA.= MEAN DIA.= MEAN DIA.=	D_{-1}^{30}	64.10 μm 83.93 μm 109.00 μm				
NUMBER	MEDIAN DIA	D _N .1 D _N .5	<56 µm <56 µm 122.22 µm				
VOLUME	MEDIAN DIA	DV.1 DV.5 DV.9	66.15 µm 131.01 µm 185.99 µ.:				

RELATIVE SPAN= 0.91

No report - data provided by Temple Bowen, Novo Labs.

Nozzle	AU7000	Slice Rate	4 MHz
RPM	8000	AVG	100
Spray Pressure	33 psi	DFM	1 cm.
Airspeed	55 mph	BAR	1.5
Flow Rate	1.85 gpm	Distance to Prob	e 40 cm.
Tank Mix	TM Biocontrol	Sample Interval	1 sec.
		Number of Sample	s 60
FILE: C:\PMS\DATA	4\02209111.999	Number of Sample	Rings 7

FILE: C:\PMS\DATA\02209111.999
Blade Angle 30 degrees

Number of Tests Combined: 1

UPPER	M/DAGI\	N/Cm ² s	Gm/M ² S	% N	9	ACCUMU % N	JLATED % VOL.
LIMIT ;	N(RAW)	N/Cm S			% VOL.		~ VOLI.
56	1316	7.79E+07	25632.03	42.16	1.57	42.16	1.57
89	1923	1.97E+07	39150.52	10.66	2.40	52.82	3.98
122	3549	2.81E+07	1.71E+05	15.22	10.48	68.04	14.46
154	5784	3.29E+07	4.50E+05	17.79	27.62	85.83	42.07
187	4236	1.78E+07	4.61E+05	9.64	28.30	95.47	70.37
220	1534	5.78E+06	2.53E+05	3.13	15.51	98.60	85.88
252	473	1.77E+06	1.20E+05	0.96	7.38	99.55	93.26
284	159	535302	53769.07	0.29	3.30	99.84	96.56
318	56	163476	23502.42	0.09	1.44	99.93	98.00
351	18	61558	12038.93	0.03	0.74	99.96	98.74
382	8	36186	9240.69	0.02	0.57	99.98	99.31
414	1	13676	4502.35	0.01	0.28	99.99	99.59
447	1	13219	5508.46	0.01	0.34	100.00	99.92
479	1	2361	1224.17	0.00	0.08	100.00	100.00
TOTAL	1.91E+04	1.85E+08	1.63E+06				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 19060/ 36888 = 51.7%

NUMBER MEAN DIA.= D $_{10}$... 91.32 μ m VOLUME MEAN DIA.= D $_{30}$... 119.02 μ m SAUTER MEAN DIA.= D $_{32}$... 149.43 μ m

NUMBER MEDIAN DIA.=D $_{N.5}^{D}\dots$ 80.55 μm $_{N.9}^{D}\dots$ 168.57 μm

VOLUME MEDIAN DIA.=DV.1... 107.91 μm DV.5... 163.54 μm DV.9... 237.92 μm

RELATIVE SPAN= 0.79

DTG 83/12/01 04:58:56

20 PSI BLADE ANGLE 60 DEGREES

DFM=1.0--3.0 MHz

UPPER						A CC U	AULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	3 11	& VOL.	3 1	JCV_L
56	2835	1.586 07	0.52	45.52	2.04	45.52	2.04
89	4509	4.75€ 06	0.94	13.68	3.70	59.20	5.74
122	3944	4.192 06	2.54	12.05	9.97	71.25	15.72
154	3919	5.38E 06	7.35	15.48	28.86	86.74	44.57
1៥7	4164	3.58E 06	9.28	10.32	36.40	97.05	30.97
219	1918	396098	3.92	2.58	15.37	99.63	96.34
252	414	116468	0.79	0.34	3.11	99.97	99.46
284	53	5066	0.06	0.02	0.24	99.99	99.70
318	9	4828	0.07	0.01	0.27	100.00	99.97
351	0	0	0.00	0.00	0.00	100.00	99.97
382	1	323	0.01	0.00	0.03	100.00	100.00
414	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		3.47E 07	25.49				•

TOTAL RAW PARTICLES.... 21771/26693-- 81.56%

NUMBER MEAN DIAMETER... 35.71 MICROMETERS S.D.... 51.32

VOLUME MEAN DIAMETER... 111.96 MICROMETERS S.D.... 127.85

SAUTER MEAN DIAMETER... 140.61 MICROMETERS

D_{NO.1}... 0.00 MICROMETERS D_{VO.1}... 103.02 MICROMETERS

D_{N0.5}... 67.08 MICROMETERS D_{V0.5}... 159.20 MICROMETERS R.S.... 0.65

 $D_{N0.9}$... 164.72 MICROMETERS $D_{V0.9}$... 206.33 MICROMETERS

Drg 83/12/01 05:50:53

20 PSI BLADE ANGLE 20 DEGREES

ACCUMULATED

DF1=1.0--3.0 111z

LIMIT	N(RAW)	N/SEC	gm/SEC	<u>z n</u>	Z VOL.	<u>% N</u>	<u>% VOL.</u>	
		3.121 07						
8 9	3430	7.275 06	1.45	11.90	4.88	52.94	8.35	
122	8433	1.100 07	5.67	17.97	22.53	80.91	30.38	
154	704 7	9.858 0€	12.11	14.49	40.92	95.39	71.80	
137	3912	2.330 00	6.04	3.82	20.41	99.21	92.21	
219	1698	412184	1.80	0.67	5.09	99.88	93.29	
252	385	63112 7442	0.43	0.10	1.45	99.99	99.75	
234	33	7442	J.U7	0.01	U.25	103.00	100.00	
310	1	17	0.00	0.00	0.00	100.00	100.00	
351	1	18	0.00	0.00	0.00	109.00	100.00	
332	O	18	0.00	0.00	0.00	100.00	100.00	
TOTALS		3.11E U7	29 . 60					
TOTAL R	AW PARTI	CLES	36818/4679	96 78.6	38			
NUABER	MEAN DIA	MOTER	75.91 MIC!	NUMETERS	S.D	43.09		
OFFINE	MEAN DIA	ALTER	07.47 MICE	ROMETERS	S.D	112.46		
SAUTER	AIG MAIN	GIETER 1	21.54 MICE	ROMETERS				
D _{NU.5}	. ა.00	MICROMETER MICROMETER AICROMETER	RS D _{VO}	5 137	35 MICRO 7.03 MICRO 3.71 HICRO	Meters	P.S (0.67

Reference #4

UPPER

UNIMIZER, 145 MPH, 1.8 GPM, 8500 RPM, DIPEL 8L, UNDILUTED

DTG 85/05/20 03:16:00

38 PSI

DFM=1.0--4.0 MHz

BLADE SETTING #5

UPPER						ACCU	MULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	<u>8 N</u>	%_VOL.	<u>8 </u>	% VOL.
56	3442	6.72E 07	2.21	53.52	5.95	53.52	5.95
8 9	13481	3.13E 07	6.21	24.89	16.73	78.41	22.69
122	10023	1.72E 07	10.43	13.68	28.09	92.08	50.78
154	4265	7.21E 06	9.87	5.74	26.58	97.83	77.36
187	1279	2.22E 06	5.74	1.77	15.47	99.59	92.83
219	211	412347	1.80	0.33	4.86	99.92	97.68
252	37	67117	0.46	0.05	1.23	99.97	98.91
284	9	21719	0.22	0.02	0.59	99.99	99.50
318	2	6225	0.09	0.00	0.24	100.00	99.74
351	2	4894	0.10	0.00	0.26	100.00	100.00
382	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.26E 08	37.13				

TOTAL RAW PARTICLES.... 32751/44426-- 73.72%

NUMBER MEAN DIAMETER... 65.47 MICROMETERS S.D.... 34.14

VOLUME MEAN DIAMETER... 82.68 MICROMETERS S.D.... 103.15

SAUTER MEAN DIAMETER... 103.67 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 64.24 MICROMETERS

D_{N0.5}... 0.00 MICROMETERS D_{V0.5}... 121.02 MICROMETERS R.S.... 0.97

D_{N0.9}... 116.91 MICROMETERS D_{V0.9}... 181.25 MICROMETERS

UNIMIZER,5900 RPM,100 MPH,3.1 GPM,THURICIDE $\frac{1}{}$

DTG 84/04/11 15:57:08 15 PSI

DFM=1.0--3.0 MHz

BLADE SETTING #6

UPPER						ACCU	ULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>₹ N</u>	%_VOL.	<u>₹_N</u>	% VOL.
56	1247	1.28E 08	4.22	54.71	3.18	54.71	3.18
೪ 9	2344	3.86E 07	7.66	16.44	5.78	71.16	8.96
122	2807	2.93E 07	17.80	12.50	13.42	83.65	22.39
154	2905	1.95E 07	26.61	8.30	20.07	91.95	42.46
187	2115	1.04E 07	27.05	4.45	20.40	96.41	62.87
219	1302	5.15E 06	22.53	2.20	17.00	98.50	79.86
252	545	2.43E 06	16.52	1.03	12.46	99.64	92.33
284	157	651146	6,54	0.28	4.93	99.91	97.26
318	50	116966	1.68	0.05	1.27	99.96	98.53
351	17	29570	0.58	0.01	0.44	99.98	98.96
382	3	53812	1.37	0.02	1.04	100.00	100.00
414	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		2.34E 08	132.57				

TOTAL RAW PARTICLES.... 13992/18530-- 75.51%

NUMBER MEAN DIAMETER... 73.74 MICROMETERS S.D.... 48.03

VOLUME MEAN DIAMETER... 102.63 MICROMETERS S.D.... 135.17

SAUTER MEAN DIAMETER... 139.57 MICROMETERS

 $D_{N0.1}$... 0.00 MICROMETERS $D_{V0.1}$... 91.48 MICROMETERS $D_{N0.5}$... 166.47 MICROMETERS $D_{V0.5}$... 166.47 MICROMETERS $D_{V0.9}$... 246.29 MICROMETERS

1/Thuricide 32LV & Water - 1:1

DTG 84/01/11 16:29:30

30 PSI

BLADE SETTING #6

OFM=1.0--3.0 MHz

UPPER						ACCUN	MULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	₹ <u>N</u>	% VOL.	<u>₹ N</u>	% VOL.
56	1711	1.03E 08	3.38	57.60	1.58	57.60	1.58
8 9	3195	2.27E 07	4.51	12.70	2.10	70.30	3.68
122	2999	1.70E 07	10.34	9.53	4.83	79.83	8.51
154	2276	1.19E 07	16.22	6.64	7.57	86.47	16.08
187	1804	8.45E 06	21.89	4.73	10.22	91.20	26.31
219	1845	5.19E 06	22.71	2.91	10.60	94.11	36.91
252	1781	3.63E 06	24.74	2.03	11.55	96.14	48.46
284	1362	3.07E 06	30.81	1.72	14.38	97.86	62.84
318	747	1.93E 06	27.81	1.08	12.99	98.94	75.83
351	368	1.15E 06	22.45	0.64	10.48	99.59	86.31
382	156	330836	8.45	0.19	3.94	99.77	90.25
414	73	188849	6.22	0.11	2.90	99.88	93.16
447	4 6	37097	1.55	0.02	0.72	99.90	93.88
479	30	54725	2.84	0.03	1.32	99.93	95.20
512	15	52247	3.32	0.03	1.55	99.96	96.75
545	8	1212	0.09	0.00	0.04	99.96	36.80
578	8	67869	6.27	0.04	2.93	100.00	99.72
611	6 2	2223	0.24	0.00	0.11	100.00	99.84
644		821	0.11	0.00	0.05	100.00	99.89
677	0	0	0.00	0.00	0.00	100.00	99.89
710	1	1389	0.24	0.00	0.11	100.00	100.00
743	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.79E 08	214.18				

TOTAL RAW PARTICLES.... 18433/26242-- 70.24%

NUMBER MEAN DIAMETER... 81.75 MICROMETERS S.D.... 67.57

VOLUME MEAN DIAMETER... 131.86 MICROMETERS S.D.... 195.85

SAUTER MEAN DIAMETER... 203.85 MICROMETERS

 $D_{N0.1}$... 0.00 MICROMETERS $D_{V0.1}$... 128.09 MICROMETERS $D_{V0.5}$... 255.32 MICROMETERS R.S... 0.99

D_{N0.9}... 178.89 MICROMETERS D_{V0.9}... 381.82 MICROMETERS

Reference #4

8001 FF,0 Degrees,40 psi,50 mph , 0.1 $\ensuremath{\mathtt{gpm}}$, Water

D'IG 83/05/26 14:44:56

DFM=1.0--1.5 MHz

UPPER						ACCUI	MULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	<u>8 N</u>	<pre>%_VOL.</pre>	<u>8 N</u>	₹ VOL.
56	4401	2.19E 06	0.07	41.77	1.12	41.77	1.12
89	11611	747524	0.15	14.26	2.30	56.04	3.42
122	16379	710587	0.43	13.56	6.69	69.60	10.11
154	16720	656120	0.90	12.52	13.91	82.12	24.02
187	12896	420936	1.09	8.03	16.90	90.15	40.93
219	9112	247742	1.08	4.73	16.79	94.88	57.72
252	6132	1 36 46 0	0.93	2.60	14.41	97.48	72.13
284	3746	70308	0.71	1.34	10.95	98.82	83.08
318	2042	38982	0.56	0.74	8.69	99.57	91.77
351	957	14309	0.28	0.27	4.34	99.84	96.11
382	367	5750	0.15	0.11	2.28	99.95	98.39
414	115	1189	0.04	0.02	0.61	99.97	99.00
447	32	891	0.04	0.02	0.58	99.99	99.57
479	10	502	0.03	0.01	0.40	100.00	99.98
512	3	25	0.00	0.00	0.02	100.00	100.00
545	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		5.24E 06	6.45				

TOTAL RAW PARTICLES.... 34523/99865-- 84.64%

NUMBER MEAN DIAMETER... 95.22 MICROMETERS S.D.... 64.19

VOLUME MEAN DIAMETER... 133.01 MICROMETERS S.D.... 171.24

SAUTER MEAN DIAMETER... 178.46 MICROMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 121.39 MICROMETERS $D_{V0.5}...$ 204.77 MICROMETERS R.S... 0.92

D_{N0.9}... 186.66 MICROMETERS D_{V0.9}... 310.56 MICROMETERS

8601 FF,90 Degrees,40 psi,50 mph, $0.1~\mathrm{gpm}$, Water

8 N

3 VCL.

ACCUMULATED

\$ AOT.

DTG 83/05/19 16:45:27

DFM=2.0--2.0 MHz

N/SEC qm/SEC

56	2810	2.45E 06	0.08	48.43	1.15	48.43	1.15	
89	3721	704302		13.91	2.00		3.15	
122	4454	46 2979	0.28	9.15	4.02	71.48	7.17	
154	46 3 4	512073	0.70	10.12	10.00	81.60	17.17	
187	4772	355740		7.03	13.16			
219	3837	222078	0.97		13.87			
252	3 3 6 0	153694		3.04	14.95			
284	2817	97085	0.98	1.92	13.93		73.07	
318	1928	56425	0.81	1.11	11.58		84.65	
351	1221	28887	0.57	0.57	8.07	99.65	92.72	
382	631	12361	0.32	0.24	4.51	99.90	97.23	
	241	3555	0.12	0.07	1.67	99.97	98.90	
447	89	1128	0.05	0.02	0.67	99.99	99.57	
479	31	401	0.02	0.01	0.30	100.00	99.87	
512	7	78	0.00	0.00	0.07	100.00	99.94	
545	1	7	0.00	0.00	0.01	100.00	99.95	
578	1	7	0.00	0.00	0.01	100.00	99.96	
611	0	0	0.00	0.00	0.00	100.00	99.96	
644	0	0	0.00	0.00	0.00	100.00		
677	0	0	0.00	0.00	0.00	100.00		
710	0	0	0.00	0.00	0.00	100.00		
743	1	15	0.00	0.00	0.04	100.00	100.00	
776	0	0	_0.00	0.00	0.00	100.00	100.00	
TOTALS		5.06E 06	7.00					
10120		3.000 00	7.00					
TOTAL R	AW PARTI	CLES 3	4556/3652	5 94.6	51%			
		02201111		3.00				
NUMBER	MEAN DIA	METER 9	2.63 MICR	OMETERS	S.D	70.04		
VOLUME	MEAN DIA	METEF 13	8.29 MICE	OMETERS	S.D	183.99		

Reference #4

SAUTER MEAN DIAMETER... 196.12 MICROMETERS

D_N0.1... 0.00 MICROMETERS

D_{N0.5}... 60.00 MICROMETERS
D_{N0.9}... 197.27 MICROMETERS

UPPER

LIMIT

N (PAW)

D_{V0.1}... 130.96 MICROMETERS

D_{V0.9}... 340.15 MICROMETERS

D_{V0.5}... 232.27 MICROMETERS R.S.... 0.90

3001 FF,135 Degrees,40 psi,50 mph, 0.1 gpm, Water DTG 81/05/01 15:14:52

DFM=2.0--1.5 MHz

UPPER						ACCU	MULATED
LIMIT	H (RAW)	N/SEC	qm/SEC	₹ - <u>N</u>	§ VCL.	<u>₹ N</u>	% VCL.
56	1756	4.02E 06	0.13	57.16	2.07	57.16	2.07
63	1831	1.06 L 06	0.21	15.09	3.30	72.25	5.37
122	2548	530814	0.32	7.55	5.04	79.80	10.41
154	26 97	556720	0.76	7.92	11.92	87.73	22.33
187	2734	349423	0.90	4.97	14.16	92.70	36.49
219	2528	205436	0.90	2.52	14.06	95.62	50.54
252	2289	151338	1.03	2.15	16.14	97.78	56.68
284	1 & 26	83637	0.87	1.23	13.62	99.01	80.30
318	1 26 0	40808	0.59	0.58	9.18	99.59	89.48
351	7 60	18083	0.35	0.26	5.54	99.85	95.01
3 & 2	367	7063	0.18	0.10	2.82	99.95	97.84
414	149	2529	0.08	0.04	1.30	99.98	99.14
447	61	953	0.04	0.01	0.62	100.00	99.76
479	13	172	0.01	0.00	0.14	100.00	99.90
512	1	10	0.00	0.00	0.01	100.00	99.91
545	0	0	0.00	0.00	0.00	100.00	99.91
5 7 8	0	0	0.00	C.00	C.00	100.00	99.91
611	1	52	0.01	0.00	0.09	100.00	100.00
644	C	0	0.00	C.00	0.00	100.00	100.00
1CTALS		7.03E 06	6.39				

TOTAL RAW PARTICLES.... 20841/22296-- 93.47%

NUMBER MEAN DIAMETER... 78.49 MICROMETERS S.D.... 60.33

VOLUME MEAN DIAMETER... 120.25 MICROMETERS S.D.... 167.85

SAUTER MEAN DIAMETER... 177.41 MICROMETERS

8001 FF,0 Degrees,40 psi,100 mph, 0.1 gpm, Water DTG 83/05/26 15:31:06

ACCUMULATED

DFM=1.0--3.0 MHz

011 011						" CCO.	.ODMITUD		
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>8 №</u>	% VOL.	<u>8 N</u>	% VOL.		
56	1882	1.83E 06	0.06	37.03	C.88	37.03	0.88		
89	5426	777939	0.15	15.77	2.28	52.80	3.16		
122	6 86 4	755385	0.46	15.31	6.76	68.11	9.92		
154	6 86 5	623730	0.85	12.64	12.56	80.75	22.48		
187	5680	404850	1.05	8.20	15.44	88.95	37.92		
219	4009	246123	1.08	4.99	15.85	93.94	53.77		
252	26 26	144270	0.98	2.92	14.47	96.86	68.24		
284	2025	77402	0.78	1.57	11.45	98.43	79.59		
318	1282	48274	0.69	0.98	10.22	99.41	89.91		
351	46 7	18898			5.44	99.79			
382	195	4547	0.12	0.09	1.71	99.89	97.06		
414	80	4514	0.15	0.09	2.19	99.98	99.25		
447	43	667	0.03	0.01	0.41	99.99	99.66		
479	22	322	0.02	0.01	0.25	100.00	99.91		
512	5	46	0.00	0.00	0.04	100.00	99.95		
545	3	31	0.00	0.00	0.04	100.00	99.99		
5 78	1	11	0.00	0.00	0.01	100.00	100.00		
611	0	0	0.00	0.00	0.00	100.00	100.00		
TOTALS		4.93E 06	6.79						
TOTAL RAW PARTICLES 37475/42343 88.50%									
NUMBER MEAN DIAMETER 99.87 MICROMETERS S.D 65.89									
VOLUME MEAN DIAMETER 138.06 MICROMETERS S.D 177.08									

SAUTER MEAN DIAMETER... 183.80 MICROMETERS

$D_{N0.1}$	0.00	MICROMETERS	Dv0.1	121.82 MICROMETERS		
D _{N0.5}	83.41	MICROMETERS	D _{v0.5}	212.10 MICROMETERS	R.S	0.93
		MICROMETERS		318.84 MICROMETERS		

Reference #4

UPPER

8001 FF,90 Degrees,40 psi,100 mph, 0.1 gpm, Water DTG 83/05/05 09:51:48

ACCUMULATED

DFM=2.0--3.0 MHz

LIMIT	N (RAW)	N\SEC	qm/SEC	₹ _ N	%_VOL.	<u>₹ _N</u>	₹ NOT	
56	1340	3.91E 06	0.13	48.15	2.24	48.15	2.24	
89	1387	1.94E 06	0.39	23.89	6.73	72.04	8.97	
122	1732	6 4 26 56	0.39	7.90	6.80	79.95	15.77	
154	2376	725104	0.99	8.92	17.28	88.87	33.06	
187	2017	454060	1.18	5.59	20.49	94.45	53.55	
219	1662	274830	1.20	3.38	20.94	97.83	74.49	
252	1 26 9	115191	0.78	1.42	13.68	99.25	88.17	
284	85 3	49352	0.50	0.61	8.64	99.86	96.81	
318	361	9285	0.13	0.11	2.33	99.97	99.13	
351	57	1754	0.03	0.02	0.60	99.99	99.73	
382	12	386	0.01	0.00	0.17	100.00	99.90	
414	4	6 4	0.00	0.00	0.04	100.00	99.94	
447	1	9	0.00	0.00	0.01	100.00	99.95	
479	1	57	0.00	0.00	0.05	100.00	100.00	
512	O	0	0.00	0.00	0.00	100.00	100.00	
TOTALS		8.13E 06	5.74					
TOTAL RAW PARTICLES 13072/14209 92.00%								
NUMBER MEAN DIAMETER 78.83 MICROMETERS S.D 52.34								

VOLUME MEAN DIAMETER... 110.51 MICROMETERS S.D.... 143.39

SAUTER MEAN DIAMETER... 150.72 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 93.92 MICROMETERS D_{N0.5}... 58.82 MICROMETERS D_{V0.5}... 181.56 MICROMETERS R.S.... 0.91 Dito. 9... 160.96 MICROMETERS Dv0.9... 258.78 MICROMETERS

Reference #4

UPPEF

8001 FF,135 Degrees,40 psi, 100 mph, 0.1 gpm, Water D1G 83/05/06 09:52:24

DFM=2.0--3.0 MHz

UPPER						ACCU	MULATED	
LIMIT	N (RAW)	NZSEC	qm/SEC	<u>8 </u>	<pre>%_VOL.</pre>	<u>8_N</u>	%_VCL.	
56	1033	4.79E 06	0.16	56.24	2.83	56.24	2.83	
89	1039	1.47E 06	0.29	17.23	5.25	73.47	8.08	
122	1742	707256	0.43	ε.30	7.72	81.77	15.80	
154	2162	626145	0.86	7.35	15.40	89.12	31.20	
187	1913	507233	1.31	5.95	23.62	95.08	54.82	
219	1706	244089	1.07	2.87	19.19	97.94	74.01	
252	1 26 5	116025	0.79	1.36	14.21	99.31	88.22	
284	728	49437	0.50	0.58	8.93	99.89	97.15	
318	26 3	817 7	0.12	0.10	2.11	99.98	99.26	
351	28	538	0.01	0.01	0.19	99.99	99.45	
382	6	63	0.00	0.00	0.03	99.99	99.48	
414	3	088	0.03	0.01	0.52	100.00	100.00	
447	0	0	_0.00	0.00	0.00	100.00	100.00	
TOTALS		8.52E 06	5.56					

TOTAL RAW PARTICLES.... 11888/12985-- 91.55%

NUMBER MEAN DIAMETER... 74.78 MICROMETERS S.D.... 52.02

VOLUME MEAN DIAMETER... 107.68 MICROMETERS S.D.... 142.11

SAUTER MEAN DIAMETER... 150.44 MICROMETERS

Reference #4

8001 FF,0 Degrees,40 psi,150 mph, 0.1 gpm, Water
DTG 83/04/26 01:45:35

DFM=1.0--4.0 MIIZ

UPPER						A CC UI	MULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	$\frac{3}{8} - \frac{N}{N}$	% VOL.	<u>8 </u>	%_VOL.
56	740	1.37E 06	0.05	31.81	0.83	31.81	0.83
89	2561	761524	0.15	17.66	2.78	49.46	3.61
122	2722	801965	0.49	18.60	8.94	68.06	12.55
154	2314	554043	0.76	12.85	13.91	80.91	26.46
187	1790	367276	0.95	8.52	17.46	89.42	43.93
219	1859	236 227	1.03	5.48	18.96	94.90	62.89
252	1 26 6	127065	0.87	2.95	15.89	97.85	78.79
284	498	61442	0.62	1.42	11.33	99.27	90.12
318	213	22838	0.33	0.53	6.03	99.80	96.15
351	74	5166	0.10	0.12	1.86	99.92	98.00
382	36	2055	0.05	0.05	0.96	99.97	98.96
414	15	727	0.02	0.02	0.44	99.98	99.40
447	6	393	0.02	0.01	0.30	99.99	.99.70
479	6	292	0.02	0.01	0.28	100.00	99.98
512	1	6	0.00	0.00	0.01	100.00	99.99
545	1	7	0.00	0.00	0.01	100.00	100.00
578	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		4.31E 06	5.45				

TOTAL RAW PARTICLES.... 14102/18608-- 75.78%

NUMBER MEAN DIAMETER... 101.37 MICROMETERS S.D.... 61.38

VOLUME MEAN DIAMETER... 134.16 MICROMETERS S.D.... 165.13

SAUTER MEAN DIAMETER... 171.93 MICROMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 112.53 MICROMETERS $D_{V0.5}...$ 197.51 MICROMETERS $D_{V0.5}...$ 197.51 MICROMETERS $D_{V0.9}...$ 284.45 MICROMETERS

8001 FF,90 Degrees,40 psi,150 mph, 0.1 gpm, Water

D1G 83/05/05 10:10:26

DFN=2.0--4.0 MHz

UPPER						ACCU	MULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	<u>₹ </u>	%_VCL.	<u>8 N</u>	%_VOL.
56	684	4.05E 06	0.13	51.93	4.37	51.93	4.37
89	1400	1.75E 06	0.35	22.46	11.42	74.39	15.79
122	1089	1.06E 06	0.65	13.64	21.19	88.03	36.97
154	1373	550986	0.75	7.06	24.71	95.09	61.68
187	1299	301351	0.78	3.86	25.58	98.95	87.26
219	497	69189	0.30	0.89	9.92	99.84	97.18
252	114	12366	30.0	0.16	2.76	100.00	99.94
284	11	153	0.00	0.00	0.05	100.00	99.99
318	1	17	0.00	0.00	0.01	100.00	100.00
3 51	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		7.80E 06	3.05				

TOTAL RAW PARTICLES.... 6468/ 7361-- 87.87%

NUMBER MEAN DIAMETER... 69.74 MICROMETERS S.D.... 39.49

VOLUME MEAN DIAMETER... 90.76 MICPOMETERS S.D.... 112.13

SAUTER MEAN DIAMETEF... 116.37 MICFOMETERS

DN0.1... 0.00 MICROMETEFS DV0.1... 72.54 MICFOMETEFS DV0.5... 139.01 MICROMETEFS R.S... 0.89 DN0.9... 130.82 MICROMETERS DV0.5... 196.05 MICFOMETERS

8001 FF,135 Degrees,40 psi,150 mph, 0.1 gpm, Water DTG 83/05/06 11:29:18

N(RAW) N/SEC qm/SEC % N % VCL. % N % VOL.

ACCUMULATED

P.S.... 0.86

DFM=2.0--4.0 MHz

=====	-7		4-'					
56	856	3.68E 06	0.12	49.57	3.91	49.57	3.91	
89	1433	1.91E 06	0.38	25.67	12.24	75.24	16.15	
122	1786	743067	0.45	10.01	14.58	85.24	30.74	
154	2940	706321	0.97	9.51	31.22	94.76	61.95	
187	2237	304479	0.79	4.10	25.48	98.86	87.43	
219	827	78644	0.34	1.06	11.11	99.91	98.54	
252	209	6075	0.04	0.08	1.34	100.00	99.88	
284	26	232	0.00	0.00	0.08	100.00	99.96	
318	4	23	0.00	0.00	0.01	100.00	99.97	
351	5	41	0.00	0.00	0.03	100.00	99.99	
382	0	0	0.00	0.00	0.00	100.00	99.99	
414	1	6	0.00	0.00	C. 01	100.00	100.00	
447	υ	0	0.00	0.00	0.00	100.00	100.00	
TOTALS		7.43E 06	3.09					
TOTAL R	AW PARTI	CLES	10324/1163	28 88.	79%			
NUMBEF	MEAN DIA	METER	71.27 MICI	ROMETERS	S.D	40.48		

D_{V0.1}... 72.68 MICROMETERS
D_{V0.5}... 141.97 MICROMETERS

DV0.9... 194.57 MICROMETERS

VOLUME MEAN DIAMETER... 92.71 MICROMETERS S.D.... 113.15

SAUTER MEAN DIAMETER... 118.62 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS

D_{N0.5}... 56.81 MICROMETERS

D_{N0.9}... 138.11 MICROMETERS

Reference #4

UPPER

LIMIT

Nozzle 8002 Angle to Airstream 135 degrees Spray Pressure 40 psi Airspeed 80 mph Flow Rate .4 gpm Tank Mix NOVO Foray 48B (Undiluted) FILE: C:\PMS\DATA\04069009.200 Number of Tests Combined: 3				AVG DFM BAR Dis Sam Num Num Sca		10 1 1. Probe 20 val 3 mples 60 ans 10	cm. 5 cm. sec.
UPPER						ACCIT	MULATED
LIMIT N(RAW)	N/SEC	Gm/SEC	% N	% VOL.		
5.6	050 4	015106	0 14	50.60	1 40	EO 60	1 40
		.21E+06	0.14	50.62		50.62	
		.24E+06	0.25	14.95		65.56	
		.00E+06	0.61	12.08		77.65	
	175	749425	1.03			86.66	
	834	414680	1.07	4.99		91.64	
	598	250224	1.09			94.65	
	384	168474	1.15	2.03	11.77	96.68	
	218	111317	1.12	1.34	11.47	98.02	
	153	75161	1.08	0.90	11.08	98.92	77.28
	102	49645	0.97	0.60	9.96	99.52	87.23
382	52	24194	0.62	0.29	6.34	99.81	93.57
414	25	10528	0.35	0.13	3.55	99.93	97.12
447	11	2745	0.11	0.03	1.17	99.97	98.30
479	3	1659	0.09	0.02	0.88	99.99	99.18
512	1	427	0.03	0.01	0.28	99.99	99.46
545	1	686	0.05	0.01	0.54	100.00	100.00
TOTAL 7.27E	+03 8	.32E+06	9.75				
TOTAL ACCEP	TED RAW	PARTICLE	S / TOTAL	IMAGES	= 7271/	8041 =	90.4%
NUMBER MEAN	DTA =	ח	85 62 1m				
VOLUME MEAN	DTA =	n ¹⁰	130 88 um				
NUMBER MEAN VOLUME MEAN SAUTER MEAN	DIA.=	D ₃₂	192.95 µm				
NUMBER MEDI	AN DIA.=	D _{N.1} D _{N.5} D _{N.9}	<56 µm <56 µm 176.43 µm				
VOLUME MEDI	AN DIA.=	DV.1 · · · · DV.5 · · · · DV.9 · · · ·	120.82 µm 239.24 µm 365.30 µm				

No report - data provided by Temple Bowen, Novo Labs.

8003, 135 Degrees, 60 MPH, 40 PSI, Dipel*, gpm (not available)

DTG 85/01/29 15:40:00

DFM=1.0--2.0 MHz

UPPER						ACCU!	AULATED
TIMIT	d (RAW)	MZSEC	gm/SEC	11 8	A AOP.	<u>16 17</u>	% VOL.
56	7946	1.11E 07	0.37	56.74	1.65	56.74	1.65
89	10343	2.84E 06	0.57	14.52	2.55	71.26	4.20
122	10866	2.12E 06	1.29	10.85	5.32	82.11	10.01
154	9910	1.41E 06	1.93	7.21	8.71	89.32	18.72
187	6952	692581	1.79	3.54	მ.08	92.85	26.80
219	4800	387022	1.69	1.98	7.63	94.83	34.43
252	3395	276922	1.89	1.41	3.50	96.24	42.93
284	2738	244590	2.46	1.25	11.07	97.49	54.01
318	2301	207831	2.99	1.06	13.47	93.55	67.47
351	1732	142474	2.79	0.73	12.56	99.28	80.04
382	1117	79604	2.03	0.41	9.16	99.69	89.20
414	602	37050	1.22	0.19	5.50	99.88	94.70
447	292	15448	0.64	0.08	2.90	99.95	97.60
479	119	5654	0.29	0.03	1.32	99.98	98.92
512	47	2018	0.13	0.01	0.58	99.99	99.50
545	15	728	0.06	0.00	0.25	100.00	99.75
578	6	242	0.02	0.00	0.10	100.00	99.85
611	2	296	0.03	0.00	0.15	100.00	100.00
644	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.96E 07	22.19				

TOTAL RAW PARTICLES.... 63183/74808-- 84.46%

NUMBER MEAN DIAMETER... 79.55 MICROMETERS S.D.... 65.50

VOLUME MEAN DIAMETER... 129.37 MICROMETERS S.D.... 193.08

SAUTER MEAN DIAMETER... 203.91 MICROMETERS

DNO.1... 0.00 MICROMETERS DV0.1... 121.86 MICROMETERS DV0.5... 272.84 MICROMETERS DV0.9... 160.63 MICROMETERS DV0.9... 386.77 MICROMETERS

*Dipel 6L (1 part Dipel 6L to 2 parts water)

No report available.

Nozzle		8003		Slice	e Rate	2	MHz
Angle t	o Airstream	n 75 dec	grees	AVG		100	
•	ressure	41 ps		DFM		1 cm	١.
Airspee		65 mph		BAR		1.5	
Flow Ra		.3 gpm			ance to F	robe 45 c	m.
Tank Mi			el 8L + 0.8		le Interv		
10120 112	•		9.2x Water	_	er of Sam		
					er of Sca		
FILE: C	:\PMS\DATA	09069015.3	372		Spacing	4 cm	١.
	of Tests Co				Length	14 c	m.
					J		
UPPER						ACCUMU	LATED
LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.
	` '		·				
		,					
56	217	751629	0.02	7.43	0.07	7.43	0.07
89	417	367989	0.07	3.64	0.21	11.07	0.28
122	1330	1.53E+06	0.93	15.15	2.63	26.22	2.91
154	2315	2.42E+06	3.31	23.96	9.38	50.18	12.29
187	2526	1.98E+06	5.13	19.61	14.53	69.80	26.82
220	2170	1.23E+06	5.39	12.18	15.25	81.97	42.07
252	1765	795739	5.42	7.87	15.35	89.84	57.42
284	1291	492592	4.95	4.87	14.01	94.72	71.42
318	817	282598	4.06	2.80	11.50	97.51	82.92
351	447	145820	2.85	1.44	8.07	98.95	91.00
382	226	66586	1.70	0.66	4.81	99.61	95.81
414	92	25994	0.86	0.26	2.42	99.87	98.23
447	34	8874	0.37	0.09	1.05	99.96	99.28
479	12	2958	0.15	0.03	0.43	99.99	99.72
512	4	1020	0.06	0.01	0.18	100.00	99.90
545	1	324	0.02	0.00	0.07	100.00	99.97
578	1	118	0.01	0.00	0.03	100.00	100.00
TOTAL 1	.37E+04	1.01E+07	35.32				
TOTAL A	CCEPTED RAV	PARTICLES	7 TOTAL I	MAGES =	13663/	16855 = 8	1.1%
		_	•				
NUMBER	MEAN DIA.=	$_{-10}^{D}$ 1	.61.51 µm				
VOLUME	MEAN DIA.=	D_{30}^{-1} 1	.88.34 µm				
SAUTER	MEAN DIA.= MEAN DIA.= MEAN DIA.=	$D_{32} \dots 2$	216.87 µm				
		D _{N.1}	79.53 µm				
NUMBER	MEDIAN DIA.	$=D_{N.5}$ 1	.54.35 µm				
	MEDIAN DIA	$D_{N,9} \dots 2$	252.86 µm				
		$_{-}^{D}$ V.1 \cdots 1	.46.53 µm				
VOLUME	MEDIAN DIA	.=D 2	236.55 µm				
	MEDIAN DIA	D _{V.9} 3	347.22 µm				

No report - data provided by Dick Reardon, USDA Forest Service, AIPM.

2112	NUMBER:-	157
F 1 1 F.	NUMBER	10/

Foray Undiluted (BBN 6000) 8003 FF (90 deg. to airflow) 65 MPH, 40 PSI 1.24 liters/min.

STATISTICS

THE TABLES USE THE FOLLOWING CODE

Number = (0) Length = (1) Area = (2) Volume = (3)

PERCENTILES µm

%	(0)	(1)	(2)	(3)
10.0	14.7	22.9	55.5	80.9
15.9	17.0	31.6	69.1	92.9
25.0	20.7	47.3	83.6	108.7
50.0	38.2	85.4	116.9	142.4
75.0	80.5	122.4	151.5	190.5
84.1	100.3	140.0	169.7	263.1
90.0	119.1	155.6	194.3	393.1

DROPLET SPECTRUM PARAMETERS

NUMBER	MEDIAN DIAM	38.2	microns
NUMBER	AVERAGE DIAM	55.0	microns
VOLUME	AVERAGE DIAM	86.4	microns
SAUTER	AVERAGE DIAM	129.0	microns
VOLUME	MEDIAN DIAM	142.4	microns

SPECTRUM 'WIDTH' PARAMETERS

sigma g (0),(3)	2.24 1.53
SPAN (ASTM)	312.26
RELATIVE SPAN	2.19
'R' (VMD/NMD)	3.73

DROPS/LITRE :- 2.96E+009

TOTAL RAW NO.:- 14706

SAMPLE TIME (secs):- 424

FREQUENCY AND ACCUMULATED PERCENTAGE DATA

Nozzle 8003 Angle to Airstream 90 degrees Spray Pressure 40 psi Airspeed 100 mph Flow Rate .3 gpm Tank Mix NOVO Foray 48B (Undiluted) FILE: C:\PMS\DATA\04069006.000 Number of Tests Combined: 3				AVG DFM BAR Dis Sam Num Num Sca		1. Probe 20 val 3 mples 60 ans 10	ocm. 5 cm. sec.
UPPER LIMIT T	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	ACCU % N	MULATED % VOL.
56 89 122 154 187 220 252 284 318 351 382 414 447 479 512 545 578 611 644	1035 1534 1148 820 494 279 178 118 105 88 83 90 73 49 31 12 3	7.16E+06 1.92E+06 1.47E+06 1.08E+06 643296 380233 254834 182631 167585 125654 122333 120654 100550 57156 37961 13574 3484 3271 358	0.24 0.38 0.89 1.47 1.66 1.74 1.83 2.41 2.46 3.12 3.97 4.19 2.96 2.41 1.05 0.32 0.36 0.05	51.73 13.88 10.62 7.78 4.65 2.75 1.84 1.32 1.21 0.91 0.88 0.87 0.73 0.41 0.27 0.10 0.03 0.02 0.00	0.71 1.15 2.69 4.44 5.02 5.01 5.23 5.53 7.26 7.41 9.41 11.97 12.63 8.93 7.27 3.15 0.97 1.08 0.14	51.73 65.60 76.22 84.00 88.65 91.40 93.24 94.56 95.77 96.68 97.56 98.44 99.16 99.58 99.95 99.95 99.97 100.00	0.71 1.86 4.55 8.99 14.01 19.02 24.25 29.78 37.04 44.45 53.86 65.83 78.46 87.39 94.66 97.81 98.78 99.86 100.00
	ACCEPTED RA	1.38E+07 W PARTICLE	33.18 ES / TOTAL	IMAGES :	= 6143/	7368.66	7 = 83.4%
NUMBER VOLUME SAUTER	MEAN DIA.= MEAN DIA.= MEAN DIA.=	D ₁₀ D ₃₀ D ₃₂	94.48 µm 166.13 µm 274.98 µm				
NUMBER	MEDIAN DIA	D _{N.1} D _{N.5}	<56 µm <56 µm 203.09 µm	REL	ATIVE SPAI	N = 0.89	
VOLUME	MEDIAN DIA	D _{V.1} D _{V.5}	160.95 µm 370.36 µm 491.14 µm				

No report - data provided by Temple Bowen, Novo Labs.

•		
FILE	NUMBER:-	155

Foray Undiluted (BBN 6000) 8003 FF (90 deg. to airflow) 110 MPH, 40 PSI 1.24 liters/min.

STATISTICS

THE TABLES USE THE FOLLOWING CODE

Number = (0) Length = (1) Area = (2) Volume = (3)

PERCENTILES µm

%	(0)	(1)	(2)	(3)
10.0	15.8	28.4	59.5	86.4
15.9	18.9	38.8	73.1	99.5
25.0	23.6	55.0	89.1	115.8
50.0	47.7	92.0	124.8	156.1
75.0	88.8	131.3	168.3	227.1
84.1	109.4	152.5	197.6	273.8
90.0	127.8	172.5	239.6	321.1

DROPLET SPECTRUM PARAMETERS

]	NUMBER	MEDIAN	DIAM	47.7	microns
1	NUMBER	AVERAGE	DIAM	62.1	microns
1	VOLUME	AVERAGE	DIAM	95.2	microns
:	SAUTER	AVERAGE	DIAM	138.8	microns
1	VOLUME	MEDIAN	DIAM	156.1	microns

SPECTRUM 'WIDTH' PARAMETERS

sigma g (0),(3)	2.53 1.57
SPAN (ASTM)	234.72
RELATIVE SPAN	1.50
'R' (VMD/NMD)	3.27

DROPS/LITRE :- 2.22E+009

TOTAL RAW NO.:- 22603

SAMPLE TIME (secs):-

FREQUENCY AND ACCUMULATED PERCENTAGE DATA

		Number	Le	ength		Area		Volume
size µm		(0)	(1)		(2)		(3)
size µm 25.5 40.4 55.2 70.1 84.9 99.6 114.3 129.2 145.2 158.9 173.4 188.3 203.0 217.8 232.5 247.5 262.5 277.5 292.5 307.5 322.5 337.5	28.7 15.9 10.8 9.4 8.2 7.8 4.3 3.4 2.1 1.0 5.3 2.2 1.1			_	1.5 2.8 4.0 6.0 7.9 9.6 10.4 10.2 7.3 5.1 9.0 9.8 1.7 1.9 8.8 5.5		.2 .7 1.4 2.7 4.4 6.5 8.2 9.1 10.1 8.4 7.5 6.7 4.1 3.1 3.2 2.3 2.0 1.7 1.8	
352.5	.0	99.9	. 2	99.4	. 6	97.4	1.4	92.7
367.5 382.5	.0	99.9	.1	99.5	.5	97.9 98.4	1.3	94.0 95.4
397.5 412.5	.0	100.0	.1	99.8 99.9	.6	99.0 99.3	1.6	97.0 98.0
427.5 442.5	.0	100.0 100.0	.1	100.0	. 3 . 2	99.7 99.9	1.0	99.0 99.6
472.5 487.5	.0	100.0	.0	100.0	.1	99.9 100.0	. 2 . 2	99.8 100.0

Angle to Airstream Spray Pressure Airspeed Flow Rate	90 degrees 40 psi 110 mph 0.3 gpm 50% SAN 415 SC 32L	DFM BAR Distance to Pr V Sample Interva	100 1 cm. 1.5 obe 46 cm. ! 300 sec.
FILE: C:\PMS\DATA\D Number of Tests Com		Number of Samp Number of Scan Scan Spacing Scan Length	5 cm.
UPPER Limit N(RAW)	_N/SEC Gm/SEC	<u>%_N %_VQL.</u>	ACCUMULATED %_N %_YQL.
89 6365 4 122 6038 3 154 5138 2 187 3393 1 220 2489 252 1921 284 1336 318 882 351 555 382 321		16.13 3.35 12.38 7.85 8.77 12.54 4.70 12.69 2.87 13.14 1.76 12.52 1.03 10.85 0.59 8.82 0.33 6.78 0.19 5.08 0.07 2.52 0.04 1.69 0.01 0.30 1	51.12 1.76 67.26 5.11 79.63 12.95 88.41 25.49 93.10 38.18 95.98 51.32 97.74 63.84 98.77 74.69 99.36 83.51 99.69 90.28 99.88 95.37 79.95 97.88 99.99 99.58 00.00 100.00
TOTAL 3.28E+04 2			
NUMBER MEAN DIA. = VOLUME MEAN DIA. = SAUTER MEAN DIA. =	D ₁₀ 81.94 μm D ₃₀ 122.33 μm D ₃₂ 177.45 μm	IMAGES = 32770/ 4	.0240 = 81.4%
NUMBER MEDIAN DIA.=	D _{N.1} (56 µm :D _{N.5} (56 µm D _{N.9} 165.50 µm		
VOLUME MEDIAN DIA.=	D _{V.1} 109.52 µп D _{V.5} 216.59 µm D _{V.9} 349.91 µm		

No report - data provided by Temple Bowen, Sandoz Crop Protection.

```
8004
                                             Slice Rate
                                                                4 M MHz
Angle to Airstream
                      90
                                            AVG
                                                                100
                           degrees
Spray Pressure
                      40
                           psi
                                            DFM
                                                                 1 cm.
                     120
                                            BAR
                                                                 1.5
                            wbh
Airspeed
                           9Pm
                                            Distance to Probe 36 cm.
                      . 4
Flow Rate
                     *Emulsifiable DIPEL
                                            Sample Interval
                                                                 360 sec.
Tank Mix
                                            Number of Samples
                                                                1
                                             Number of Scans
FILE: C:\PMS\DATA\05208711.000
                                             Scan Spacing
                                                                 5.2 cm.
Number of Tests Combined: 2
                                             Scan Length
                                                                 25 cm.
UPPER
                                                              ACCUMULATED
                     N/SEC
                               Gm/SEC
                                         % N
                                                  % VOL.
                                                             % N
                                                                     % VOL.
LIMIT
         N(RAW)
                                _____
                                                  _____
                                          ___
                                       53.40
19.34
13.60
7.89
  56
           2605
                   1.94E+07
                                  0.64
                                                   3.84
                                                            53.40
                                                                      3.84
  89
          3941
                   7.02E+06
                                 1.40
                                                   8.40
                                                            72.74
                                                                     12.24
                                  3.00
                                                            86.34
 122
          2849
                   4.94E+06
                                                  18.04
                                                                     30.28
                                  3.92
                                                            94.24
 154
          2436
                   2.86E+06
                                                  23.60
                                                                     53.88
 187
          2156
                   1.38E+06
                                 3.58
                                         3.81
                                                  21.57
                                                            98.05
                                                                     75.45
                                        1.32
                                 2.10
                                                  12.66
                                                            99.38
 220
          1166
                     480637
                                                                     88.11
                                 1.02
                                                            99.79
 252
           552
                     149494
                                                  6.13
                                                                     94.24
 284
           284
                      50609
                                  0.51
                                         0.14
                                                   3.06
                                                            99.93
                                                                     97.30
                                       0.05
0.01
                                                            99.98
                                                   1.59
                                                                     98.89
                       18358
                                  0.26
 318
           116
                                                            99.99
 351
            45
                        5149
                                  0.10
                                                  0.61
                                                                     99.50
             20
                                                   0.35
 382
                        2244
                                  0.06
                                         0.01
                                                           100.00
                                                                     99.84
 414
             4
                         363
                                  0.01
                                          0.00
                                                   0.07
                                                           100.00
                                                                     99.91
                                                 0.03
 447
                         103
                                  0.00
                                         0.00
                                                           100.00
                                                                     99.94
              1
 479
              3
                         198
                                           0.00
                                                   0.06
                                                           100.00
                                                                    100.00
                                  0.01
TOTAL 1.62E+04
                    3.63E+07 16.61
TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 16178/ 21549 = 75.1%
                     D<sub>10</sub>....
NUMBER MEAN DIA . =
                               71.18 µm
                    D30....
VOLUME MEAN DIA .=
                             95.65 µm
SAUTER MEAN DIA .=
                             126.55 µm
NUMBER MEDIAN DIA.=D_{N.5}^{D}... <56 µm D_{N.5}^{D}... 136.89 µm
VOLUME MEDIAN DIA. =DV.1... 80.48 μm
                     DV.9... 229.68 μm
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^{*3} parts water, 2% v. bond sticker (Mission III Tank Mix - 6/16/87).

No report - data provided by Dick Reardon, USDA Forest Service, AIPM.

Nozzle 8004 Angle to Airstream 90 degrees Spray Pressure 40 psi Airspeed 120 mph Flow Rate * .4 gpm Tank Mix Flowable DIPEL ABG-6167 FILE: C:\PMS\DATA\05208712.000 Number of Tests Combined: 3				Slice Rate 4 M MHz AVG 100 DFM 1 cm. BAR 1.5 Distance to Probe 36 cm. Sample Interval 360 sec Number of Samples 1 Number of Scans 6 Scan Spacing 5.2 cm. Scan Length 25 cm.			
UPPER LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	ACCUI % N	MULATED % VOL.
56 89 122 154 187 220 252 284 318 351 382 414 447 479 512 545 578 611 644	6258 9631 7772 6041 4251 3961 3332 1861 1199 746 505 287 169 93 45 16 6 0 3	3.27E+06 2.29E+06 1.27E+06 913783 588469 258790 124735 69469 39974 21862 11316 6035 2402 606 314	0.78 1.98 3.13 3.29 4.00 4.01 2.60 1.79 1.36 1.02 0.72 0.47 0.31 0.15 0.05 0.03	43.31 17.35 14.49 10.16 5.64 4.06 2.61 1.15 0.55 0.31 0.18 0.05 0.03 0.01	2.98 7.60 12.01 12.60 15.32 15.37 9.96 6.87 5.21 3.91 2.76 1.81 1.20 0.59 0.18 0.11	43.31 60.66 75.16 85.31 90.95 95.01 97.62 98.77 99.32 99.63	4.21 11.81 23.82 36.42 51.74 67.11 77.08 83.95 89.16 93.07 95.83 97.64 98.84 99.42 99.60 99.71
TOTAL	ACCEPTED RA	W PARTICLES	S / TOTAL	IMAGES =	46176/	56998 =	81.0%
VOLUME	MEAN DIA. = MEAN DIA. = MEAN DIA. =	. D ₁₀	90.25 µm 130.33 µm 182.33 µm				
NUMBER	MEDIAN DIA	DN.1 DN.5 DN.9	<56 µm 68.99 µm 181.72 µm				
VOLUME	MEDIAN DIA	DV.1 · · · · · · · · · · · · · · · · · · ·	114.08 µm 216.14 µm 357.99 µm				

RELATIVE SPAN= 1.13

^{*3} parts water, 2% v. bond sticker (Mission III Tank Mix - 6/16/87).

No report - data provided by Dick Reardon, USDA Forest Service, AIPM.

Spray Pr Airspeed Flow Rat Tank Mix	i ce c	40 psi 100 mp .4 gpm NOVO For (Undilut	th ay 48B ed)	AVG DFM BAR Dist Samp Numb Numb Scar	tance to ole Inter per of Sa per of Sc n Spacing	amples 60 cans 10		
UPPER						ACCU	MULATED	
LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.	
	11(141)	11, 020	GIII, 020	70				
56	1153	8.34E+06	0.27	49.18	0.64	49.18	0.64	
89	1593	2.37E+06	0.47	13.94	1.10	63.12	1.74	
122	1243	2.11E+06	1.28	12.44	2.99	75.56	4.72	
154	837	1.48E+06	2.02	8.71	4.71	84.27	9.43	
187	479	794874	2.06	4.68	4.79	88.95	14.23	
220	284	440185	1.93	2.59	4.49	91.54	18.71	
252	184	302475	2.06	1.78	4.80	93.33	23.52	
284	132	212919	2.14	1.25	4.98	94.58	28.50	
318	108	177540	2.55	1.05	5.95	95.63	34.45	
351	85	144464	2.83	0.85	6.58	96.48	41.03	
382	83	144132	3.68	0.85	8.58	97.33	49.61	
414	87	135661	4.47	0.80	10.41	98.13	60.02	
447	88	127347	5.31	0.75	12.37	98.88	72.39	
479	69	96631	5.01	0.57	11.67	99.45	84.06	
512	42	55890	3.55	0.33	8.28	99.78	92.34	
545	15	20598	1.59	0.12	3.70	99.90	96.03	
578	7	10449	0.96	0.06	2.25	99.96	98.28	
611	3	5393	0.59	0.03	1.38	99.99	99.66	
644	1	1129	0.15	0.01	0.34	100.00	100.00	
TOTAL 6	. 49E+03	1.70E+07	42.91					
TOTAL AC	CCEPTED RA	AW PARTICLES	/ TOTAL	IMAGES =	= 6493/	8002 =	81.1%	
ATT TIMED ETTE A	MEAN DIA .	- D	06 50					
MONTHE P	MEAN DIA.	= D ₁₀ 1 = D ₃₀ 1 = D ₃₂ 2	90.33 µm					
SVILLED V	MEAN DIA.	30	109.10 µIII					
SAUTER 1	WAN DIA.	32	.60.36 ши					
		n	/56 1m					
NIMBER N	MEDIAN DI	$\Delta = DN.1$	50 21 rm		RELATIV	E SPAN =	0.90	
NOI DEC 1		0.5	20.21 pm					
		$ \begin{array}{c} D_{N.1} \cdots \\ A.=D_{N.5} \cdots \\ D_{N.9} \cdots 2 \end{array} $	μιι					
VOLUME I	MEDIAN DI	$A = D^{V \cdot 1}$	183 23 11m					
		$\begin{array}{c} D_{V.1} \dots & 1 \\ A.=D_{V.5} \dots & 3 \\ D_{V.9} \dots & 5 \end{array}$	100.20 µIII					
		V.9						

No report - data provided by Temple Bowen, Novo Labs.

Spray Pr Airspee Flow Ra Tank Mir	i te	40 pe 120 n .4 gg NOVO Fo (Undil	mph om oray 48B uted)	Slice Rate 4 MHz AVG 100 DFM 1 cm. BAR 1.5 Distance to Probe 20 cm. Sample Interval 3 sec. Number of Samples 60 Number of Scans 10 Scan Spacing 4 cm. Scan Length 20 cm.				
.,							-	
UPPER						ACCU	MULATED	
LIMIT é\$	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N 	% VOL.	
56	740	9.57E+06	0.31	46.93	0.98	46.93	0.98	
89	1097	3.07E+06	0.61	15.03	1.89	61.97	2.86	
122	832	2.73E+06	1.66	13.40	5.14	75.37	8.01	
154	603	1.90E+06	2.60	9.33	8.07	84.70	16.08	
187	389	1.05E+06	2.73	5.17	8.46	89.87	24.53	
220	269	612443	2.68	3.00	8.30	92.87	32.84	
252	230	471358	3.21	2.31	9.95	95.18	42.79	
284	195	313587	3.15	1.54	9.76	96.72	52.55	
318	163	251185	3.61	1.23	11.19	97.95	63.74	
351	143	192962	3.77	0.95	11.70	98.90	75.44	
382	91	108603	2.77	0.53	8.60	99.43	84.04	
414	51	53272	1.75	0.26	5.44	99.69	89.47	
447	23		1.75		4.25	99.85	93.72	
479	10	32917 9311	0.48	0.16		99.90	95.22	
					1.50			
512	7	11017	0.70	0.05	2.17	99.95	97.39	
545	3	5745	0.44	0.03	1.37	99.98	98.76	
578	1	2638	0.24	0.01	0.75	99.99	99.51	
611	2	1432	0.16	0.01	0.49	100.00	100.00	
TOTAL 4	. 85E+03	2.04E+07	32.27					
TOTAL A	CCEPTED RAI	W PARTICLE	ES / TOTAL	IMAGES	= 4848/	6087 =	79.6%	
NUMBER I VOLUME I SAUTER I	MEAN DIA.= MEAN DIA.= MEAN DIA.=	D ₁₀ D ₃₀	92.26 µm 144.63 µm 217.92 µm					
	MEDIAN DIA				RELATIVE	SPAN =	1.05	
VOLUME I	MEDIAN DIA	DV.1 DV.5 DV.9	129.75 µm 276.17 µm 418.41 µm					

No report - data provided by Temple Bowen, Novo Labs.

Nozzle		8004		Slid	ce Rate	4	MHz	
Angle t	o Airstrea	em 90 de	earees	AVG			0	
-	ressure		-	DFM		1	cm.	
	d	120 n		BAR		1.		
Flow Ra		.4 gr			tance to			
Tank Mi		NOVO F	ratz 48B		ole Inter		sec.	
Talk MI	A		BBN 4008	-	per of Sa			
					per of Sc			
DIE C	. \ DMC\ DATE	Undil					~~~	
FILE: C	: \MVS\DATA	\07039010. Combined:	201		n Spacing		cm.	
Mulliper	or rests t	ombined:	3	Scar	n Length	30	cm.	
UPPER							MULATED	
LIMIT		N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.	
/°						_		
56	1534	1.06E+07	0.35	58.22	2.23	58.22	2.23	
89	2612	3.11E+06	0.62	17.03	3.94	75.25	6.17	
122	1766	1.98E+06	1.20	10.85	7.66	86.10	13.83	
154	1094	1.09E+06	1.49	5.96	9.48	92.05	23.31	
187	651	547324	1.42	2.99	9.01	95.04	32.31	
220	422	305980	1.34	1.67	8.51	96.72	40.83	
252	317	192578	1.31	1.05	8.34	97.77	49.17	
284	230	131058	1.32	0.72	8.37	98.49	57.55	
318	176	95898	1.38	0.72	8.77	99.01	66.31	
351	138							
		70877	1.39	0.39	8.82	99.40	75.13	
382	93	44858	1.15	0.25	7.29	99.64	82.41	
414	56	28455	0.94	0.16	5.96	99.80	88.37	
447	39	19276	0.80	0.11	5.11	99.90	93.48	
479	20	10457	0.54	0.06	3.45	99.96	96.93	
512	9	4353	0.28	0.02	1.76	99.99	98.69	
545	4	2529	0.19	0.01	1.24	100.00	99.93	
578	0	126	0.01	0.00	0.07	100.00	100.00	
								
TOTAL 9	.16E+03	1.83E+07	15.72					
TOTAL A	CCEPTED RA	W PARTICLE	ES / TOTAL	IMAGES =	= 9161/	11867.6	7 = 77.2%	
NUMBER	MEAN DIA .=	= D	73.29 µm 118.02 µm 188.94 µm					
	MEAN DIA.=	$= D_{00}^{10} \dots$	118.02 um					
	MEAN DIA .=	= D ³⁰	188.94 ım					
		32						
		D	<56 1m					
NUMBER	MEDIAN DI	$A = D^{N.1}$	<56 im					
	- Lin Dir	$\frac{1}{2}$ N.5	143 23 1m					
		у.9	<56 µm <56 µm 143.23 µm					
VOLUME	MEDIAN DI	$\sqrt{-D}V.1$	255 OS ***					
V OLIOINE	WITH NIN DIE	pv.5	200.06 µm					
•		۷.9	105.46 µm 255.06 µm 424.81 µm					

No report - data provided by Temple Bowen, Novo Labs.

Spray P Airspee Flow Ra Tank Mi	te	n 90 de 40 pe 120 n .4 gg NOVO Fo (Undilu	si mph om oray 48B sted)	AVO DEN BAI Dis Sar Nur Nur Sca	M ₹	1. Probe 20 val 3: mples 60 ans 10	100 1 cm. 1.5 robe 20 cm. al 3 sec. ples 60 ns 10 4 cm.	
UPPER							MULATED	
LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.	
56	856	1.02E+07	0.34	48.09	1.03	48.09	1.03	
89	1391	3.60E+06	0.71	16.96	2.20	65.05	3.23	
122	961	2.70E+06	1.64	12.74	5.04	77.80	8.27	
154	608	1.68E+06	2.30	7.94	7.08	85.74	15.35	
187	350	936609	2.42	4.42	7.45	90.16	22.79	
220	252	592754	2.59	2.80	7.97	92.95	30.76	
252	208	424192	2.89	2.00	8.88	94.95	39.64	
284	201	361340	3.63	1.70	11.15	96.66	50.79	
318	176	268102	3.85	1.26	11.84	97.92	62.63	
351	133	177388	3.47	0.84	10.66	98.76	73.29	
382	103	132620	3.39	0.63	10.40	99.38	83.69	
414	59	76732	2.53	0.36	7.76	99.75	91.46	
447	23	26155	1.09	0.12	3.35	99.87	94.80	
479	11	14104	0.73	0.07	2.25	99.94	97.05	
512	4	6476	0.41	0.03	1.26	99.97	98.32	
545	4	6754	0.52	0.03	1.60	100.00	99.91	
578	Ō	43	0.00	0.00	0.01	100.00	99.92	
611	1	223	0.02	0.00	0.08	100.00	100.00	
011	•	220	0.02	0.00	0.00	100.00	200.00	
TOTAL 5	.34E+03	2.12E+07	32.55					
TOTAL A	CCEPTED RAV	V PARTICLE	ES / TOTAL	IMAGES	= 5339/	6890.33	4 = 77.5%	
		_						
NUMBER	MEAN DIA.=	D ₁₀	89.73 µm					
VOLUME	MEAN DIA.=	D ₃₀	143.19 µm					
SAUTER	MEAN DIA.= MEAN DIA.= MEAN DIA.=	D ₃₂	219.62 µm					
		n	/56 ım					
מים בואו זוא	אדרו זאז דו	$_{\rm D}^{\rm N.1}$	50 00 1m		RELATIV	E SPAN =	= 0.99	
NONDER	MEDIAN DIA	$^{-D}$ N.5	196 13 1m		TOTALL T	D DIIM	0.77	
	MEDIAN DIA	N.9	100.13 hm					
UOT IBATI	METAL DE	_DV.1	129.00 µm					
VOLUME	MEDIAN DIA	V.5	202.40 μm					
		۷.9	408.81 µm					

No report - data provided by Temple Bowen, Novo Labs.

Spray Pr Airspeed Flow Rat Tank Mix	ressure 1 :e : :\PMS\DATA	8004 m 135 d 40 ps 120 m .4 gp NOVO Fo (Undilu \04069010.	i ph m ray 48B ted)	Number of Samples 60 Number of Scans 10					
UPPER							MULATED		
		N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.		
ü}\$									
5.0	007	1 000.07	0.00	45 45		45 45			
56 89	907 1277	1.08E+07 3.78E+06				45.17 60.90			
122	997	3.30E+06							
154	704	2.40E+06		9.99					
187	462	1.38E+06			11.11	90.35			
220	350	850853							
252	290	545872							
284	261	390396				97.79			
318	192	251426			11.26				
351	122	133519			8.14	99.40			
382	83	79064		0.33	6.29				
414	41	41588	1.37		4.27				
447	19	14563		0.06	1.89				
479	7	5063		0.02	0.82	99.98			
512	5	3817		0.02	0.76				
545	1	459	0.04		0.11				
578	0	114	0.01	0.00	0.03	100.00	100.00		
TOTAL E	705102	2.40E+07	32.09						
TOTAL 5.	126403	2.406+01	32.09						
TOTAL AC	CEPTED RAI	W PARTICLE	S / TOTAL	IMAGES =	= 5718/	6973.334	4 = 82.0%		
NIMBER N	ÆAN DIA.=	n	Q1 58 1m						
VOLUME V	MEAN DIA -	D ₁₀ D ₃₀	126 72 1m						
א פשיניונע	MEAN DIA	_D 30	106.62 µm						
SHOTLICE	EMI DIA	32	190.02 μιι						
		ח	<56 1m						
NUMBER N	MEDIAN DIA	.=D _{N.5} D _{N.9}	66 40 1m						
		$D^{N.5}$	185.28 1m						
		N.9	100.20 μπ						
		D.,	122.60 um						
VOLUME N	MEDIAN DIA	.=D,	240.50 um						
		DV.1 DV.5 DV.9	372.75 Lm						
		v.9	,						
RELATIV	RELATIVE SPAN= 1.04								

No report - data provided by Temple Bowen, Novo Labs.

Spray P Airspee Flow Ra Tank Mi	te x	40 ps. 100 mp .4 gpm NOVO Fo: 5% Wa:	90 degrees 40 psi 100 mph .4 gpm NOVO Foray 48B with 5% Water			cance to be le Interper of Samer of Scan Spacing	1. Probe 20 val 3: mples 60 ans 10	cm. 5 cm. sec.
						_		
UPPER	NT (TO 8 (-T)	N /CEG	O /CEO	04	3.7	04 1707		MULATED
LIMIT	N(RAW)	N/SEC	Gm/SEC	%	N	% VOL.	% N	% VOL.
					_			
56	678	5.87E+06	0.19	47.	64	0.45	47.64	0.45
89	1122	1.62E+06	0.32	13.	13	0.74	60.77	1.19
122	848	1.28E+06	0.78	10.	40	1.80	71.17	2.99
154	625	1.01E+06	1.38		19	3.20	79.36	6.19
187	356	643876	1.67		.23	3.86	84.59	10.05
220	229	450836	1.97		66	4.57	88.25	14.62
252	141	270222	1.84		.19	4.26	90.44	18.88
284	91	200849	2.02		63	4.67	92.07	23.56
318	74	169331	2.43		37	5.64	93.44	29.19
351	68	145403	2.84		18	6.59	94.62	35.78
382	86	162293	4.14		.32	9.60	95.94	45.38
414	91	161626	5.32		31	12.32	97.25	57.70
447	83	133773	5.57		.09	12.91	98.34	70.61
479 512	66 44	111091	5.76		90	13.34	99.24	83.95
545	18	51269 24305	3.26 1.87		42	7.55	99.66 99.85	91.49 95.83
5 4 5	8	11907	1.10		10	4.33 2.55	99.95	98.37
611	3	4503	0.49		.04	1.14	99.99	99.52
644	1	1620	0.21		01	0.48	100.00	100.00
011	•	1020	0.21	٠.	.01	0.40	100.00	100.00
TOTAL 4	.63E+03	1.23E+07	43.18					
TOTAL A	CCEPTED RA	W PARTICLE	S / TOTAL	IMAC	SES =	4632/	5770.33	4 = 80.3%
NI IMPER	MEAN DIA -	- n	107 45 ım					
VOLUME	MEAN DIA =	D10	188 53 1m					
SAUTER	MEAN DIA.=	D ₁₀ D ₃₀	305.15 µm					
		D	<56 µm					
NUMBER	MEDIAN DIA	$A = D_{N-1}^{N-2} \dots$	62.20 µm			RELAT	IVE SPAN	= 0.81
		$A = D_{N \cdot 1} \dots D_{N \cdot 5} \dots$ $D_{N \cdot 9} \dots$	245.89 µm					
		D	106 07					
COT I BATE	METAR DE	V.1 · · ·	180.87 hm					
VOLUME	MEDIAN DIA	$A = \begin{bmatrix} D & 1 & \cdots \\ D & 1 & \cdots \\ D & 0 & \cdots \\ D & 0 & \cdots \end{bmatrix}$	594.38 µm					
		V.9	υσ. 11 μm					

No report - data provided by Temple Bowen, Novo Labs.

Spray F Airspec Flow Ra Tank Mi	Pressure ed ate ix	40 ps 100 m .4 gp NOVO Fo 10% W	90 degrees 40 psi 100 mph .4 gpm NOVO Foray 48B with 10% Water			ance to 1	10 1 1. Probe 20 val 3 mples 60 ans 10	cm. 5 cm. sec.
UPPER								MULATED
LIMIT &]	N(RAW)	N/SEC	Gm/SEC	% :	N 	% VOL.	% N 	% VOL.
56	961	7.94E+06	0.26	50	07	0.67	50.07	0.67
89	1477	2.17E+06	0.43	13.		1.10	63.73	1.76
122	1104	1.80E+06	1.09		37	2.79	75.10	4.55
154	712	1.30E+06	1.78	8.		4.53	83.29	9.09
187	389	711926	1.84	4.		4.70	87.78	13.78
220	242	480545	2.10	3.		5.36	90.82	19.14
252	161	333369	2.27		10	5.79	92.92	24.93
284	106	214459	2.15		35	5.49	94.27	30.42
318	99	186531	2.68		18	6.84	95.45	37.26
351	96	164244	3.21		04	8.19	96.48	45.45
382	96	168020	4.29		06	10.94	97.54	56.39
414	100	152523	5.02		96	12.80	98.51	69.19
447	79	107612	4.48		68	11.43	99.18	80.62
479	53	81447	4.22	o.		10.76	99.70	91.38
512	26	31293	1.99	0.		5.07	99.90	96.45
545	10	11897	0.92		08	2.33	99.97	98.79
578	2	2257	0.21		01	0.53	99.98	99.32
611	2	2438	0.27	0.		0.68	100.00	100.00
	_		0,2.					
TOTAL 5	5.72E+03	1.59E+07	39.23					
TOTAL A	ACCEPTED RA	W PARTICLE	S / TOTAL	IMAG	ES =	5715/	6986.66	7 = 81.8%
NUMBER	MEAN DIA.=	: D	96.98 1m					
VOLUME	MEAN DIA.=	D ¹⁰	167.87 um					
SAUTER	MEAN DIA. = MEAN DIA. =	D ₃₂	273.05 µm					
		D	<56 um					
NUMBER	MEDIAN DIA	=DN.1	56.09 um			7.77	AMTITE C	DAN - 0 06
	MEDIAN DIA	D. 5	211.02 im			RE	LATIVE S.	PAN = 0.86
		_N.9	221.02 MII					
		D	160 73 1m					
VOLUME.	MEDIAN DIA	V.=DV.1	364.63 11m					
	MEDIAN DIA	DV.5	475.56 1m					
		~V.9'''	-10.00 pil					

No report - data provided by Temple Bowen, Novo Labs.

Nozzle		8004		Sli	.ce Rate	4	MHz
Angle to	o Airstream	90 de	grees	AVG	3	100)
Spray P		40 ps	_	DFM		1 (⊐m.
Airspee		-	ph	BAR		1.9	5
Flow Ra		.4 gp	_		tance to		
Tank Mi			er in NOVO		ple Inter		sec.
		Foray 4			ber of Sa		
					ber of Sc		
FILE: C	:\PMS\DATA\(04069014.	500		n Spacing		cm.
	of Tests Cor		3		n Length		cm.
•							
UPPER						ACCU	MULATED
LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.
	(,	,	,	• •	•		
56	981	12294	4.04	51.99	0.72	51.99	0.72
89	1611	3535	7.03	14.95	1.26	66.94	1.98
122	1192	2512	15.25	10.62	2.72	77.56	4.70
154	766	1665	22.79	7.04	4.07	84.60	8.77
187	454	963	24.92	4.07	4.45	88.67	13.22
220	280	568	24.87	2.40	4.44	91.07	17.66
252	195	418	28.50	1.77	5.09	92.84	22.75
284	131	333	33.41	1.41	5.97	94.25	28.71
318	113	288	41.41	1.22	7.39	95.47	36.11
351	111	271	53.06	1.15	9.47	96.61	45.58
382	99	223	56.88	0.94	10.16	97.56	55.74
414	110	251	82.70	1.06	14.77	98.62	70.51
447	73	147	61.42	0.62	10.97	99.24	81.47
479	53	114	59.27	0.48	10.58	99.72	92.06
512	23	50	31.56	0.21	5.64	99.93	97.69
545	7	10	7.49	0.04	1.34	99.98	99.03
578	3	4	4.06	0.02	0.73	99.99	99.75
611	0	1	1.37	0.01	0.25	100.00	100.00
TOTAL 6	.20E+03	2.36E+04	560.02				
TOTAL A	CCEPTED RAW	PARTICLE	S / TOTAL	IMAGES	= 6203/	23286 =	26.6%
NUMBER	MEAN DIA.= MEAN DIA.= MEAN DIA.=	D ₁₀	93.61 µm				
VOLUME !	MEAN DIA.=	D ₂₀	165.44 µm				
SAUTER	MEAN DIA.=	D ₃₀	274.33 µm				
	MEDIAN DIA.:	D_{N-1}	<56 µm				
NUMBER	MEDIAN DIA.:	$=D_{N}^{N-1}$	<56 µm		RELATIVE	SPAN = 0	.85
		$D_{N}^{N} \circ \cdots$	205.15 µm				
		D _{V/ 1}	163.42 µm				
VOLUME	MEDIAN DIA.:	$=D_{V_{5}}^{V_{5}}$	365.26 µm				
	MEDIAN DIA.:	$D_{V,Q}$	473.39 µm				

No report - data provided by Temple Bowen, Novo Labs.

Nozzle 8004 Angle to Airstream 90 degrees Spray Pressure 40 psi Airspeed 100 mph Flow Rate .4 gpm Tank Mix 50% Water in NOVO Foray 48B FILE: C:\PMS\DATA\04069015.000 Number of Tests Combined: 3					Slice Rate 4 M AVG 100 DFM 1 cm. BAR 1.5 Distance to Probe 20 cm Sample Interval 3 sec Number of Samples 60 Number of Scans 10 Scan Spacing 4 cm. Scan Length 20 cm				
t IDDED						A COURT	ATT NOTES		
UPPER	M(DMI)	N (CEC	O /OTO	04 37	04 1707		MULATED		
LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.		
q,									
56	886	11559	3.80	51.72	1.18	51.72	1.18		
89	1131	3259	6.48	14.58	2.01	66.30	3.20		
122	898	2583	15.68	11.56	4.88	77.86	8.07		
154	609	1856	25.41	8.31	7.90	86.16	15.97		
187	361	1047	27.08	4.68	8.42	90.85	24.39		
220	251	665	29.11	2.98	9.05	93.82	33.44		
252	181	414	28.19	1.85	8.76	95.67	42.21		
284	171	329	33.00	1.47	10.26	97.14	52.46		
318	134	225	32.40	1.01	10.20	98.15	62.54		
351	108	161	31.55	0.72	9.81	98.88	72.35		
382	83	100	25.52	0.12	7.93	99.32	80.28		
414	67	77	25.24	0.34	7.85	99.67	88.13		
447	36	41	17.07	0.18	5.31	99.85	93.43		
479	17	16	8.08	0.18	2.51	99.92	95.95		
512	12	10	6.46	0.05	2.01	99.96	97.96		
545	5	6	4.90	0.03	1.52	99.99	99.48		
578	. 2	1	1.12	0.01	0.35	100.00	99.83		
611	1	1	0.55	0.00	0.17	100.00	100.00		
011	•	•	0.33	0.00	0.11	100.00	100.00		
TOTAL 4	1.95E+03	2.23E+04	321.66						
TOTAL A	ACCEPTED RAV	V PARTICLES	5 / TOTAL	IMAGES	= 4954/	20766 =	23.9%		
NUMBER	MEAN DIA =	D	97 03 1m						
VOLUME	MEAN DIA =	D10	ο 1.03 μm						
SAUTTER	MEAN DIA.= MEAN DIA.= MEAN DIA.=	20	217 12 m						
01.0111	. IIII DIA	32	ε11.15 μπ						
		D	<56 1m						
NUMBER	MEDIAN DIA	.≡DN.1	<56 m	D.T.	T AMTUR OF	N 1 07			
	MEDIAN DIA	$D^{N.5}$	181 34 im	KE	ELATIVE SPA	M = 1.07			
		N.9	101.04 μιι						
		D	129.66 ım						
VOLUME	MEDIAN DIA	.=D.	276.87 11m						
	MEDIAN DIA	D. 5	425.94 um						
		V.9	ben't						

No report - data provided by Temple Bowen, Novo Labs.

8004 FF,0 Degrees,40 ps1,50 moh, 0.4 gpm, Water

DTG 83/04/27 09:42:10

DFM=1.0--2.0 MHz

UPPER						ACCUN	MULATED
LIMIT	N (RAW)	NZSEC	gm/SEC	8 N	%_VOL.	<u>8 N</u>	3 VOL.
56	1750	2.94E 06	0.10	42.51	0.37	42.51	0.37
89	3304	857378	0.17	12.39	0.65	54.91	1.02
122	3357	748571	0.45	10.82	1.73	65.73	2.75
154	2565	570706	0.78	8.25	2.98	73.98	5.73
187	1845	445972	1.15	6.45	4.40	80.42	10.13
219	1337	328370	1.44	4.75	5.47	85.17	15.60
252	970	248072	1.69	3.59	6.44	88.75	22.05
284	812	209151	2.10	3.02	8.01	91.78	30.06
318	605	158509	2.28	2.29	8.69	94.07	33.74
351	519	102243	2.00	1.48	7.63	95.55	46.37
382	4 36	106037	2.71	1.53	10.32	97.08	56.69
414	286	59195	1.95	0.86	7.43	97.93	64.12
447	202	43899	1.83	.0.63	6.98	98.57	71.10
479	125	29381	1.52	0.42	5.81	98.99	76.91
512	102	21950	1.40	0.32	5.32	99.31	82.22
5 4 5	6 9	23610	1.82	0.34	6.93	99.65	89.15
578	41	15390	1.42	0.22	5.42	99.88	94.57
611	21	1849	0.20	0.03	0.77	99.90	95.34
644	14	3515	0.45	0.05	1.73	99.95	97.07
677	7	674	0.10	0.01	0.39	99.96	97.46
710	6	1257	0.22	0.02	0.83	99.98	98.29
743	1	160	0.03	0.00	0.12	99.98	98.41
776	2	397	0.09	0.01	0.35	99.99	98.76
809 842	0 3	0	0.00	0.00	0.00	99.99 99.99	98.76
87.5	0	Ü	0.00	0.00 0.00	0.00 0.00	99.99	98.76 98.76
908	0	0	0.00	0.00	0.00	99.99	98.76
941	1	788	0.32	0.00	1.24	100.00	100.00
974	0	0	0.00	0.00	0.00	100.00	100.00
	U			0.00	0.00	100.00	100.00
TOTALS		6.92E 06	26.23				

TOTAL RAW PARTICLES.... 18477/21663-- 85.29%

NUMBER MEAN DIAMETER... 116.79 MICROMETERS S.D.... 103.19

VOLUME MEAN DIAMETER... 193.54 MICROMETERS S.D.... 282.37

SAUTER MEAN DIAMETER... 298.49 MICROMETERS

8004 FF,90 Degrees,40 psi,50 mph, 0.4 gpm, Water DTG 83/05/20 09:46:35

DFM=2.0--2.0 MHz

UPPER						ACCUN	MULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	<u>₹ _ N</u>	₹ VCL.	<u>₹_N</u>	%_VOL.
56	2905	5.74E 06	0.19	48.31	0.60	48.31	0.60
89	4049	1.69E 06	0.34	14.24	1.06	62.55	1.66
122	3799	921252	0.56	7.76	1.77	70.31	3.42
154	3994	1.04E 06	1.42	8.72	4.47	79.03	7.90
187	3604	755 97 5	1.96	6.37	6.18	85.40	14.08
219	2765	474052	2.07	3.99	6.54	89.39	20.62
252	2 26 2	333049	2.27	2.81	7.17	92.20	27.79
284	1 86 4	228309	2.29	1.92	7.24	94.12	35.03
318	1533	194498	2.80	1.64	8.83	95.76	43.86
351	1282	151202	2.96	1.27	9.34	97.03	53.20
382	1063	127565	3.26	1.07	10.29	98.11	63.49
414	822	86134	2.84	0.73	8.96	98.83	72.44
447	566	50608	2.11	0.43	6.66	99.26	79.10
479	412	34545	1.79	0.29	5.66	99.55	84.76
512	282	18399	1.17	0.15	3.69	99.71	88.45
545	195	1286 2	0.99	0.11	3.13	99.81	91.58
5 7 8	153	9082	0.84	90.0	2.65	99.89	94.23
611	92	5389	0.59	0.05	1.87	99.94	96.09
644	59	2485	0.32	0.02	1.01	99.96	97.11
677	44	1739	0.26	0.01	0.83	99.97	97.93
710	28	1546	0.27	0.01	0.85	99.99	98.78
743	20	912	0.18	0.01	0.58	99.99	99.36
776	8	748	0.17	0.01	0.54	100.00	99.90
809	2	4 8	0.01	0.00	0.04	100.00	99.94
842	1	49	0.01	0.00	0.05	100.00	99.98
875	0	0	0.00	0.00	0.00	100.00	99.98
908	0	0	0.00	0.00	0.00	100.00	99.98
941	1	13	0.01	0.00	0.02	100.00	100.00
974	0	0	_0.00	0.00	0.00	100.00	100.00
TOTALS		1.19E 07	31.67				

TOTAL RAW PARTICLLS.... 31805/35601-- 89.34%

NUMBER MEAN DIAMETER... 102.07 MICROMETERS S.D.... 91.21

VOLUME MEAN DIAMETER... 172.13 MICROMETERS S.D.... 256.80

SAUTER MEAN DIAMETER... 272.16 MICROMETERS

 $D_{N0.1}$... 0.00 MICROMETERS $D_{V0.1}$... 165.50 MICROMETERS $D_{V0.5}$... 339.97 MICROMETERS $D_{V0.5}$... 339.97 MICROMETERS $D_{V0.9}$... 528.15 MICROMETERS

Reference #4

ACCUMULATED

P.S.... 1.05

DTG 83/05/23 14:55:03

DFM=2.0--1.5 MHz

OFFLK							.ULATED
LIMIT	N (RAW)	NZSEC	qm/SEC	8 N	<pre>%_VOL.</pre>	<u>8 </u>	<pre>% VOL.</pre>
56	3653	8.12E 06	0.27	52.98	1.04	52.98	1.04
89	3956	2.36E 06	0.47	15.41	1.82		
122	4373	1.18E 06	0.72	7.70	2.78	76.09	
154	4957	1.29E 06 782800 496757	1.76	7.70 8.39 5.11 3.24	6.83	64.48 89.59 92.83	12.47
187	5020	782800	2.03	5.11	7.87	89.59	20.35
219	4327	496757	2.17	3.24	8.43	92.83	28.78
252	3900	341576	2.33	2.23	9.04	95.05	37.82
284	3310	221391	2.22	1.44	8.64	96.50	46.45
318	2905	169643	2.44	1.11	9.47 10.10 8.66 7.82 6.65	97.61	55.93
351	2468	132894	2.60	0.87	10.10	98.47	66.02
382	1854	87342 61172 41078	2.23 2.01 1.71	0.57	8.66	99.04	74.68
414	1528	61172	2.01	0.40	7.82	99.44	82.51
447	1232	41078	1.71	0.27	6.65	99.71	89.16
	8 6 1			0.15	4.74	99.86	93.89
	491					99.94	
	26 7	5382	0.41	0.04	1.61	99.98	98.39
578	101	2052	0.19 0.10 0.05	0.01 0.01 0.00	0.74	99.99 99.99 100.00	99.13
611	59	907 389	0.10	0.01	0.39	99.99	99.51
644	23	907 389 297	0.05	0.00	0.19	100.00	99.71
677	13	297	0.04	0.00	0.17	100.00	99.88
710	3	30	0.01				
743	3	114			0.09	100.00	99.99
776	0 0	0	0.00	0.00	0.00	100.00	99.99
809 842	0	0		0.00	0.00 0.00	100.00 100.00 100.00 100.00	99.99
875	1	3	0.00 0.00	0.00 0.00	6.01	100.00	100 00
908	0	C	0.00	0.00	0.01	100.00	100.00
	U			0.00	0.00	100.00	100.00
TOTALS		1.53E 07	25.75				
TOTAL H	RAW PARTI	CLES	45305/4988	38 90.	81%		
NUMBER	MEAN DIA	METER	88.76 MICI	ROMETERS	S . D	. 76.60	
VOLUME	MEAN DIA	AMETER 1	47.55 MICE	ROMETERS	S.D	. 220.63	
SAUTER	MEAN DIA	AMETER 2	33.69 MICI	ROMETERS			
3							

0.00 MICROMETERS

D_{N0.5}... 0.00 MICROMETERS

£NO.9... 191.17 MICROMETERS

DN0.1...

UPPER

DV0.1... 142.66 MICROMETERS

D_{V0.5}... 296.65 MICROMETERS

DV0.9... 452.71 MICROMETERS

Reference #4

8004 FF,0 DEgrees,40 psi,100 mph, 0.4 gpm, Water

DTG 83/04/27 10:28:42

DFM=1.0--3.0 MHz

UPPER						ACCU	MULATED.
LIMIT	N(RAW)	N/SEC	<u>qm/SEC</u>	<u>₹_N</u>	<pre>%_VOL.</pre>	<u>₹ _7</u>	<pre>%_VOL.</pre>
56	1683	2.91E 06	0.10	34.83	0.33	34.83	0.33
89	3770	1.23E 06	0.24	14.72	0.84	49.55	1.17
122	3903	1.06E 06	0.65	12.73	2.21	62.28	3.38
154	3516	925390	1.27	11.08	4.34	73.37	7.72
187	2529	667233	1.73	7.99	5.92	81.36	13.64
219	1987	395887	1.73	4.74	5.93	86.10	19.57
252	1386	303360	2.07	3.63	7.08	89.73	26.65
284	1183	271562	2.73	3.25	9.35	92.99	36.00
318	933	204735	2.94	2.45	10.09	95.44	46.09
351	614	125293	2.45	1.50	8.40	95.94	54.49
382	391	72370	1.85	0.87	6.33	97.81	60.83
414	248	45994	1.51	0.55	5.19	98.36	66.02
447	195	51901	2.16	0.62	7.41	98.98	73.43
479	153	3477 7	1.80	0.42	5.18	99.39	79.61
512	119	17109	1.09	0.20	3.73	99.60	83.34
545	6 9	56 3 4	0.43	0.07	1.49	99.67	84.83
578	51	12353	1.19	0.15	4.07	99.82	88.89
611	35	3932	0.43	0.05	1.48	99.87	90.37
644	19	1954	0.25	0.02	0.86	99.89	91.23
6 7 7	16	1507	0.23	0.02	0.78	99.91	92.01
710	6	1483	0.26	0.02	0.88	99.93	92.90
743	6	45 3	0.09	0.01	0.32	99.93	93.21
776	5 1	164	0.04	0.00	0.13	99.93	93.34
809	1	56	0.01	0.00	0.05	99.93	93.39
842	2	2500	0.73	0.03	2.52	99.96	95.91
875	1	219	0.07	0.00	0.25	99.97	96.16
908	1	199	0.07	0.00	0.25	99.97	96.41
941	1	2376	0.9ຮ	0.03	3.36	100.00	99.77
974	1	147	0.07	0.00	0.23	100.00	100.00
1007	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		3.35E 06	29.17				

TOTAL RAW PARTICLES.... 22825/26953-- 84.68%

NUMBER MEAN DIAMETER... 119.58 MICROMETERS S.D.... 96.33

VOLUME MEAN DIAMETER... 188.34 MICRONETERS S.D.... 292.44

SAUTER MEAN DIAMETER... 283.34 MICROMETERS

 $D_{N0.1}$... 0.00 MICROMETERS $D_{V0.1}$... 167.00 MICROMETERS $D_{V0.5}$... 333.64 MICROMETERS R.S.... 1.30

D_{N0.9}... 254.50 MICRCMETERS D_{V0.9}... 602.21 MICROMETERS

8004 FF,90 Degrees,40 psi,100 mph, 0.4 gpm, Water DTG 83/05/04 16:05:17

DFM=2.0--3.0 MHz

UPPER						ACCUI	MULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>8 N</u>	% VCL.	<u>8 N</u>	₹ VOL.
56	2307	8.62E 06	0.28	47.84	1.17	47.84	1.17
89	26 4 3	2.96E 06	0.59	16.42	2.42	64.25	3.59
122	3782	1.62E 06	0.99	9.01	4.06	73.26	7.64
154	3685	1.85E 06	2.53	10.26	10.41	83.52	18.05
187	2932	1.2CE 06	3.12	6.69	12.85	90.21	30.90
219	2459	643721	2.81	3.57	11.59	93.78	42.48
252	1904	389205	2.65	2.16	10.92	95.94	53.40
284	1853	326921	3.28	1.81	13.52	97.76	66.92
318	1688	206846	2.97	1.15	12.24	98.91	79.16
351	1130	102218	2.00	0.57	8.23	99.47	87.40
382	662	53503	1.37	0.30	5.62	99.77	93.02
414	389	20784	0.68	0.12	2.82	99.88	95.84
447	163	11052	0.46	0.06	1.90	99.95	97.73
479	88	7478	0.39	0.04	1.60	99.99	99.33
512	44	1272	0.08	0.01	0.33	99.99	99.66
545	18	709	0.05	0.00	0.22	100.00	99.89
578	6	54	0.01	0.00	0.02	100.00	99.91
611	3	118	0.01	0.00	0.05	100.00	99.96
644	0	0	0.00	0.00	0.00	100.00	99.96
677	3	51	0.01	0.00	0.03	100.00	99.99
710	0	0	0.00	0.00	0.00	100.00	99.99
743	0	0	0.00	0.00	0.00	100.00	99.99
776	1	8	0.00	0.00	0.01	100.00	100.00
809	0	0	0.00	0.00	C. 00	100.00	100.00
TOTALS		1.80E 07	24.29				

TOTAL RAW PARTICLES.... 25760/29052-- 88.67%

NUMBER MEAN DIAMETER... 90.54 MICROMETERS S.D.... 69.07

VOLUME MEAN DIAMETER... 137.12 MICROMETERS S.D.... 190.32

SAUTER MEAN DIAMETER... 198.80 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 129.08 MICPOMETERS

 $D_{N0.5}$... 60.61 MICROMETERS $D_{V0.5}$... 242.17 MICROMETERS R.S.... 0.98

D_{N0.9}... 186.25 MICROMETERS D_{V0.9}... 366.23 MICROMETERS

8004 FF,135 Degrees,40 psi,100 mph, 0.4 gpm, Water DTG 83/05/06 11:43:49

DFM=2.0--3.0 MHz

UPPER						ACCUI	MULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	8 N	₹ VOL.	<u>₹ _ N</u>	%_VOL.
56	839	8.29E 06	0.27	42.96	1.13	42.96	1.13
89	1151	2.79E 06	0.56	14.48	2.30	57.44	3.42
122	2273	2.08E 06	1.26	10.76	5.21	68.20	8.64
154	2448	2.21E 06	3.02	11.46	12.50	79.66	21.14
187	2389	1.76E 06	4.56	9.12	18.85	88.78	39.99
219	2152	1.24E 06	5.42	6.42	22.40	95.20	62.38
252	1750	463101	3.15	2.40	13.04	97.60	75.43
284	1495	275733	2.77	1.43	11.45	99.03	86.88
318	1011	1 306 20	1.88	0.68	7.76	99.71	94.64
351	339	40723	0.80	0.21	3.29	99.92	97.93
382	101	8132	0.21	0.04	0.86	99.96	98.79
414	24	797	0.03	0.00	0.11	99.97	98.90
447	7	6289	0.26	0.03	1.08	100.00	99.98
479	1	67	0.00	0.00	0.01	100.00	100.00
512	1	10	0.00	0.00	0.00	100.00	100.00
545	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.93E 07	24.19				

TOTAL RAW PARTICLES.... 15981/18027-- 88.65%

NUMBER MEAN DIAMETER... 95.79 MICROMETERS S.D.... 65.22

VOLUME MEAN DIAMETER... 133.83 MICROMETERS S.D.... 168.17

SAUTER MEAN DIAMETER... 178.49 MICROMETERS

D_{NO.1}... 0.00 MICROMETERS D_{V0.1}... 125.20 MICPOMETERS D_{NO.5}... 72.31 MICROMETERS

D_{V0.5}... 201.70 MICROMETERS R.S.... 0.85

D_{V0.9}... 297.58 MICROMETERS

Reference #4

D_{N0.9}... 193.20 MICROMETERS

8004 FF,0 Degrees,40 psi,150 mph, 0.4 gpm, Water

D1G 83/04/27 11:15:59

DFM=1.0--4.0 MHz

UPPER						ACCU	MULATED
LIMIT	H(RAW)	4\2EC	qm/SEC	<u>8 N</u>	%_VCL.	<u>₹ </u>	₹ VCL.
5 ó	498	2.39E 06	0.08	27.19	0.39	27.19	0.39
89	1679	1.565 06	0.31	17.78	1.54	44.97	1.93
122	1926	1.51E 06	0.92	17.21	4.56	62.18	6.49
154	1665	1.17E 06	1.59	13.25	7.91	75.44	14.40
187	1071	685586	1.78	7.80	8.81	83.24	23.21
219	884	483160	2.11	5.50	10.49	38.74	33.70
252	802	391408	2.67	4.46	13.24	93.20	46.94
284	410	301671	3.03	3.43	15.04	96.63	61.98
318	193	125515	1.80	1.43	ε . 95	98.06	70.94
351	107	54438	1.07	0.ó2	5.29	98.68	76.23
382	71	45117	1.15	0.51	5.72	99.19	81.94
414	35	32665	1.08	0.37	5.34	99.57	87.28
447	36	14803	0.52	0.17	3.06	99.73	90.35
479	22	5273	0.27	0.06	1.35	99.79	91.70
512	10	1996	0.13	0.02	0.63	99.82	92.33
545	10	2913	0.22	0.03	1.11	99.85	93.45
578	5	10867	1.00	0.12	4.98	99.97	98.43
611	3	779	0.09	0.01	0.42	9 9.9 8	98.85
644	4	892	0.12	0.01	0.57	99.99	99.42
677	0	0	0.00	0.00	0.00	99.99	99.42
710	2	668	0.12	0.01	0.58	100.00	100.00
743	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		8.79E 06	20.14				

TOTAL RAW PARTICLES.... 9433/11287-- 83.57%

NUMBER MEAN DIAMETER... 116.08 MICROMETERS S.D.... 78.24

VOLUME MEAN DIAMETER... 163.66 MICROMETERS S.D.... 227.47

SAUTER MEAN DIAMETER... 223.71 MICROMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 136.25 MICROMETERS $D_{V0.5}...$ 258.51 MICROMETERS R.S.... 1.19

D_{N0.9}... 228.76 MICROMETERS D_{V0.9}... 443.58 MICROMETERS

8004 FF,90 Degrees,40 psi,150 mph, 0.4 gpm, Water DTG 83/05/04 16:27:56

DFM=2.0--4.0 MHz

UPPER						ACCU	MULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	<u>₹ _N</u>	% VCL.	<u>8 N</u>	%_VOL.
56	776	1.03E 07	0.34	45.98	2.12	45.98	2.12
89	1 26 8	4.64E 06	0.92	20.63	5.74	66.61	7.86
122	1433	2.18E 06	1.33	9.71	8.26	76.32	16.11
154	2125	2.74E U6	3.75	12.18	23.33	88.50	39.44
187	1869	1.40E 06	3.63	6.23	22.57	94.73	62.01
219	1300	884769	3.87	3.94	24.08	98.66	86.09
252	650	26 0888	1.78	1.16	11.07	99.82	97.16
284	126	32548	0.33	0.14	2.04	99.97	99.20
318	43	5867	0.08	0.03	0.53	99.99	99.72
351	19	767	0.02	0.00	0.09	100.00	99.81
382	1	9	0.00	0.00	0.00	100.00	99.81
414	1	27	0.00	0.00	0.01	100.00	99.82
447	1	691	0.03	0.00	0.18	100.00	100.00
479	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		2.25E 07	16.06				

TOTAL RAW PARTICLES.... 9612/11748-- 81.82%

NUMBER MEAN DIAMETER... 82.04 MICROMETERS S.D.... 51.71

VOLUME MEAN DIAMETER... 110.95 MICROMETERS S.D.... 136.10

SAUTER MEAN DIAMETER... 145.24 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 97.50 MICROMETERS

D_{NO.5}... 62.70 MICROMETERS D_{VO.5}... 169.72 MICROMETERS R.S.... 0.79

 $D_{N0.9...}$ 162.22 MICROMETERS $D_{V0.9...}$ 231.10 MICROMETERS

8004 FF,135 Degrees,40 psi,150 mph, 0.4 gpm, Water

DTG 83/05/06 12:04:26

DFM=2.0--4.0 MIIz

UPPER						ACCUI	MULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>8 N</u>	% VCL.	<u>₹_N</u>	%_VOL.
56	459	1.15E 07	0.38	48.34	2.69	48.34	2.69
89	829	4.91E 06	0.98	20.60	6.94	68.93	9.63
122	1388	2.24E 06	1.36	9.38	9.66	78.32	19.29
154	1 86 8	2.85E 06	3.90	11.95	27.70	90.27	46.99
187	1643	1.65E 06	4.27	6.91	30.33	97.18	77.33
219	1054	581796	2.54	2.44	18.07	99.62	95.39
252	410	85227	0.58	0.36	4.12	99.98	99.52
284	36	4851	0.05	0.02	0.35	100.00	99.86
318	8	121	0.00	0.00	0.01	100.00	99.88
351	2	26	0.00	0.00	0.00	100.00	99.88
382	0	0	0.00	0.00	0.00	100.00	99.88
414	0	0	0.00	0.00	0.00	100.00	99.88
447	1	402	0.02	0.00	0.12	100.00	100.00
479	0	0	<u>0.00</u>	0.00	0.00	100.00	100.00
TOTALS		2.39E 07	14.08				

TOTAL RAW PARTICLES.... 7698/ 9917-- 77.62%

NUMBER MEAN DIAMETER... 78.10 MICROMETERS S.D.... 47.73

VOLUME MEAN DIAMETER... 104.10 MICROMETERS S.D.... 125.43

SAUTER MEAN DIAMETER... 134.66 MICROMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 90.19 MICROMETERS $D_{N0.5}...$ 58.93 MICROMETERS $D_{V0.5}...$ 157.55 MICROMETERS $D_{V0.9}...$ 153.86 MICROMETERS $D_{V0.9}...$ 210.09 MICROMETERS

Nozzle Angle to Airstream Spray Pressure Airspeed Flow Rate Tank Mix	8006 FLA n 90 degre 40 psi 135 mph .6 gpm DIPEL 8L	? e s	AVG DFM BAR Dist Samp Numb	e Rate ance to F le Interver of Samer of Sca	nples 1
FILE: C:\PMS\DATA\ Number of Tests Co			Scan	Spacing Length	
UPPER LIMIT N(RAW)	_N/SEC	<u>Gm/SEC</u>	<u>% _N</u>	%_YQL.	ACCUMULATED %_N %_YOL.
56 3055 89 5419 122 4081 154 3496 187 2564 220 1960 252 1442 284 986 318 544 351 297 382 107 414 48 447 13 479 4 512 0 545 0 578 2 TOTAL 2.40E+04	1.47E+07 4.78E+06 3.77E+06 3.03E+06 1.93E+06 1.34E+06 760971 415939 193022 110990 28821 14665 4594 538 0 659	0.48 0.95 2.29 4.15 4.99 5.85 5.18 4.18 2.77 0.48 0.19 0.00 0.00	47.37 15.35 12.12 9.75 6.20 4.30 2.45 1.34 0.62 0.05 0.05 0.01 0.00	1.40 2.75 6.63 12.03 14.46 16.95 15.02 12.10 8.04 6.29 2.13 1.40 0.58 0.00	47.37 1.40 62.72 4.16 74.84 10.79 84.59 22.81 90.79 37.27 95.08 54.21 97.53 69.23 98.86 81.33 99.48 89.37 99.84 95.66 99.93 97.79 99.98 99.19 100.00 99.82 100.00 99.82 100.00 99.62 100.00 100.00
TOTAL ACCEPTED RAL	J PARTICLES	7 TOTAL	IMAGES =	24018/	29713 = 80.8%
NUMBER MEAN DIA. = VOLUME MEAN DIA. = SAUTER MEAN DIA. =	D ₁₀ 1 D ₃₀ 1	88.42 µm 28.49 µm 179.36 µm			
NUMBER MEDIAN DIA					
VOLUME MEDIAN DIA	DV.1 1 .=DV.5 2 DV.9 3	118.02 µm 211.69 µm 321.60 µm			

RELATIVE SPAN= 0.96

Angle to Airstream Spray Pressure Airspeed Flow Rate Tank Mix		m 90 degr 40 esi	90 degrees 40 psi 135 mph .6 gpm 50% DIPEL 8L,50%		Slice Rate AVG DFM BAR Distance to Prob Sample Interval Number of Sample		100 1 cm. 1.5 0e 51 cm. 360 sec.	
				Scan Spacing 2.5 cm. Scan Length 38 cm.				
UPPER LIMIT	N(RAW)	_N/SEC	<u>Gm/SEC</u>	<u>%_N</u>	%_YQL.		1ULATED %_YQL.	
89 122 154 187 220 252 284 318	4315 6376 4657 4088 3158 2204 1410 765 355 118 64 14	7.63E+06 5.64E+06 4.11E+06 2.45E+06 1.29E+06 689459 325916 135833	1.52 3.43 5.62 6.35 5.64 4.70 3.27 1.95	16.79 12.41 9.03 5.40 2.83 1.52 0.72	4.33 9.77 16.02 18.11 16.07 13.40 9.34 5.57	67.62 80.03 89.07 94.46 97.30 98.81 99.53 99.83	6.50 16.27 32.29 50.40 66.48 79.88 89.21 94.78	
TOTAL 2	2.75E+04	4.55E+07	35.07					
TOTAL A	ACCEPTED RA			IMAGES =	= 27534/	36021 =	76.4%	
VOLUME	MEAN DIA. = MEAN DIA. = MEAN DIA. =	D ₁₀ D ₃₀ D ₃₂	79.81 µm 113.83 µm 157.79 µm					
NUMBER	MEDIAN DIA	DN.1 DN.5 DN.9	<56 µm <56 µm 160.01 µm					
VOLUME	MEDIAN DIA	DV.1 DV.5 DV.9	100.77 µm 186.56 µm 288.97 µm					
RELATIVE SPAN= 1.01								

Reference #8

Nozzle Angle to Spray Pr Airspeed Flow Ra Tank Mix FILE: C	Slice Rate 4 MHz AVG 100 DFM 1 cm. BAR 1.5 Distance to Probe 20 cm. Sample Interval 3 sec. Number of Samples 60 Number of Scans 9 Scan Spacing 3 cm. Scan Length 17 cm.						
UPPER LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	ACCUMU % N	% VOL.
TIMIT	M (PCAM)	N/SEC	GIII/ SEC	70 IN	ж vоп.	76 IV	% VOL.
							
56	900	8.44E+06	0.28	35.90	0.38	35.90	0.38
89	1196	2.73E+06	0.54	11.60	0.73	47.50	1.11
122	916	2.89E+06	1.75	12.27	2.37	59.78	3.48.
154	878	3.09E+06	4.23	13.16	5.72	72.94	9.20
187	602	2.15E+06	5.55	9.12	7.50	82.06	16.70
220	426	1.32E+06	5.77	5.61	7.80	87.68	24.51
252	325	832167	5.67	3.54	7.66	91.22	32.17
284	333	641040	6.44	2.73	8.70	93.94	40.88
318	277	447278	6.43	1.90	8.69	95.85	49.57
351	199	276533	5.41	1.18	7.31	97.02	56.88
382	170	216014	5.52	0.92	7.46	97.94	64.34
414	133	141097	4.65	0.60	6.28	98.54	70.62
447	110	112100	4.67	0.48	6.31	99.02	76.93
479	83	78666	4.08	0.33	5.51	99.35	82.44
512	57	53339	3.39	0.23	4.58	99.58	87.03
545	38	37811	2.91	0.16	3.93	99.74	90.96
578	26	27638	2.55	0.12	3.45	99.86	94.41
611	15	16100	1.76	0.07	2.39	99.93	96.80
644	6	12485	1.61	0.05	2.18	99.98	98.97
677	6	4156	0.62	0.02	0.84	100.00	99.82
710	2	544	0.09	0.00	0.13	100.00	99.94
743	0	208	0.04	0.00	0.06	100.00	100.00
TOTAL 6	.70E+03	2.35E+07	73.98				
TOTAL A	CCEPTED R	AW PARTICLE	S / TOTAL I	MAGES =	6700/	9192.667	= 72.9%
NUMBER I	MEAN DIA.	= D ₁₀ = D ₃₀ = D ₃₂	118.82 բա				
VOLUME I	MEAN DIA.	$= D_{30}^{10} \dots$	181.88 µm				
SAUTER I	MEAN DIA.:	$= D_{32} \dots$	265.60 µm				
		D_{N-1}	<56 µm				
NUMBER I	MEDIAN DI	$A = D_{N, 5}^{N, 5} \dots$	95.65 µm				
		$A = D_{N.1} \dots D_{N.5} \dots D_{N.9}$	241.16 µm				
		D_{V_1}	157.82 µm				
VOLUME I	MEDIAN DI	$A = D_{V.5}$	320.24 µm				
		DV.1 DV.5	536.75 µm				

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RELATIVE SPAN= 1.18
Reference #2

Nozzle		8006		Slice	e Rate	4	MHz		
Angle to Airstream 45 degrees			AVG		100				
	Pressure	40 ps		DFM			1 cm.		
_	Airspeed 110 mph				BAR 1.5				
	ate				ance to P	robe 20 c	m.		
	ix				le Interv				
Talk M	17	via cer		-	er of Sam				
					er of Sca				
FILE: (C:\PMS\DATA	\\ 03059115	410						
	of Tests C				Scan Spacing 3 cm. Scan Length 17 cm.				
Number	or lests t	Olibined.	2	Jean	Length	17 C	JII •		
UPPER						ACCUMU	ר בייים.		
	NT / DATAI	M/SEC	Gm/SEC	o N	% VOL.		% VOL.		
		N/SEC	GIII/ SEC	√9 1A	ъ VOL.	70 IN	ъ VOL.		
<e< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td></e<>			-						
56	720	8.67E+06	0.20	27 24	0.42	37.34	0.42		
89	730 1169	2.96E+06				50.11			
		2.96E+06 2.83E+06					1.28 3.79		
122 15 4	936			12.20 12.65	2.51 5.87	62.31			
	887	2.94E+06				74.96	9.65		
187	652	1.96E+06		8.46	7.42	83.42	17.07		
220	400	1.18E+06		5.08	7.54	88.50	24.61		
252	308	776669	5.29	3.35	7.73	91.85	32.33		
284	308	559486	5.62	2.41	8.21	94.26	40.54		
318	272	432083	6.21	1.86	9.07	96.12	49.61		
351	220	290343	5.68	1.25	8.29	97.37	57.90		
382	153	183760	4.69	0.79		98.16	64.76		
414	128	121567	4.00	0.52	5.84	98.69			
447	87	91785		0.40	5.59	99.08			
479	64	70075		0.30		99.39			
512	39	44894		0.19	4.17				
545	35	46859		0.20	5.27	99.78	90.93		
578	16	16460		0.07		99.85	93.15		
611	12	9523		0.04	1.52	99.89	94.67		
644	9	14613		0.06		99.96	97.42		
677	3	1574	0.24	0.01		99.96	97.77		
710	4	7992	1.39	0.03	2.03	100.00	99.80		
743	1	692	0.14	0.00	0.20	100.00	100.00		
_									
TOTAL 6	5.43E+03	2.32E+07	68.48						
TOTAL A	ACCEPTED RA	W PARTICLE	ES / TOTAL I	MAGES =	6428/	9315.5 =	69.0%		
NUMBER	MEAN DIA.= MEAN DIA.= MEAN DIA.=	D	114.66 µm						
VOLUME	MEAN DIA.=	D_{00}^{10}	178.03 jum						
SAUTER	MEAN DIA.=	: D ₀₀	264.06 LLM						
		32							
		D	<56 LLm						
NUMBER	MEDIAN DIA	$A = D_{1}^{N \cdot 1}$	88.98 1m						
		D. 5	234.28 um						
		_N.9							
		D							
		V.1	155.84 µm						
VOLUME	MEDIAN DIA	.=D,							
		٧.5	319.84 µm						
		٧.9	539.00 µm						

3006,135 Degrees,40 psi,120 mph, 0.61 gpm, Water DTG 84/08/23 11:28:00

DFM=1.0--4.0 MHz

UPPER						ACCU	JULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>₹_N</u>	₹ VOL.	₹ - <u>7</u>	₹ VOL.
56	1103	1.35E 07	0.44	41.03	1.61	41.03	1.61
8 9	1793	6.18E 06	1.23	18.75	4.44	59.79	5.05
122	17 98	5.21E 05	3.16	15.81	11.44	75.60	17.49
154	1800	3.85E 06	5.27	11.70	19.05	87.30	36.54
187	1708	2.25E 05	5.81	6.82	21.02	94.12	57.56
219	1312	1.11E 06	4.83	3.36	17.48	97.47	75.04
252	1038	544626	3.71	1.65	13.42	99.13	38.46
284	609	235629	2.37	0.72	8.56	99.84	97.02
318	162	43338	0.62	0.13	2.25	99.97	99.27
351	31	3764	0.07	0.01	0.27	99.99	99.54
382	18	3737	0.10	0.01	0.35	100.00	99.88
414	5	504	0.02	0.00	0.96	100.00	99.94
447	3	224	0.01	0.00	0.03	100.00	99.93
479	1	59	0.00	0.00	0.01	100.00	99.99
512	1	44	0.00	0.00	0.01	100.00	100.00
545	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		3.29E 07	27.66				

TOTAL RAW PARTICLES.... 11437/13949-- 81.99%

NUMBER MEAN DIAMETER... 87.37 MICROMETERS S.D.... 53.96

VOLUME MEAN DIAMETER... 117.09 MICROMETERS S.D.... 145.52

SAUTER MEAN DIAMETER... 152.26 MICROMETERS

D_{NO.5}... 0.00 MICROMETERS D_{VO.1}... 100.34 MICROMETERS D_{VO.5}... 175.40 MICROMETERS R.S.... 0.00 D_{NO.9}... 167.34 MICROMETERS D_{VO.9}... 257.73 MICROMETERS

DFM=1.0--4.0 MHz

UPPER						ACCU	AULATED
LIMIT	N(RAW)	N/SEC	gm/SEC	<u>8 N</u>	% VOL.	<u>8 N</u>	§ VOL.
56	2680	1.87E 07	0.61	53.60	1.91	53.60	1.91
8 9	5134	6.70E 05	1.33	19.25	4.14	72.86	6.05
122	3853	4.36E 06	2.65	12.54	3.24	85.39	14.30
154	3155	2.41E 06	3.30	6.92	10.25	92.31	24.55
187	2245	1.13E 06	2.94	3.26	9.14	95.57	33.63
219	1548	529248	2.31	1.52	7.20	97.09	40.38
252	1492	369760	2.52	1.06	7.83	98.15	48.71
284	1256	237096	2.38	0.58	7.41	98.84	56.12
318	876	122072	1.75	0.35	5.46	99.19	61.58
351	609	76128	1.49	0.22	4.63	99.40	56.21
38 2	422	53235	1.35	0.15	4.23	99.56	70.44
414	364	37624	1.24	0.11	3.85	99.67	74.29
447	309	32101	1.34	0.09	4.15	99.76	73.45
479	237	22031	1.14	0.06	3.55	99.82	32.90
512	231	20530	1.31	0.06	4.08	99.88	86.03
545	162	13710	1.06	0.04	3.28	99.92	89.37
5 7 8	115	8806	0.81	0.03	2.53	99.95	91.90
611	86	8594	0.94	0.02	2.93	99.97	94.83
644	56	4077	0.53	0.01	1.53	99.98	96.45
677	42	3492	0.53	0.01	1.63	99.99	98.09
710	17	1281	0.22	0.00	0.69	100.00	98.79
743	10	780	0.16	0.00	0.49	100.00	99.27
776	5	369	0.08	0.00	0.25	100.00	99.53
809	3 2	337	0.09	0.00	0.27	100.00	99.31
8 4 2		142	0.04	0.00	0.13	100.00	99.94
8 7 5	1	62	0.02	0.00	0.06	100.00	100.00
908	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		3.48E 07	32.15				

TOTAL RAW PARTICLES.... 24910/31317-- 79.54%

NUMBER MEAN DIAMETER... 75.40 MICROMETERS S.D.... 57.66

VOLUME MEAN DIAMETER... 120.87 MICROMETERS S.D.... 213.47

SAUTER MEAN DIAMETER... 196.02 MICROMETERS

DFM=1.0--4.0 MHz

UPPER						ACCU	IULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>8 N</u>	%_VOL.	₹ <u>7</u>	&_VOL.
56	2243	1.51E 07	0.50	49.15	1.24	49.15	1.24
89	5502	5.82E 06	1.16	19.00	2.89	68.15	4.13
122	4343	4.22E 06	2.56	13.76	6.39	81.91	10.52
154	2970	2.52E 06	3.44	8.22	8.60	90.12	19.12
187	1877	1.28E 06	3.31	4.17	8.27	94.29	27.39
219	1347	659494	2.88	2.15	7.20	96.44	34.60
252	1267	419424	2.86	1.37	7.14	97.81	41.73
284	973	223394	2.24	0.73	5.60	93.54	47.34
318	710	136153	1.96	0.44	4.89	98.99	52.23
351	480	71718	1.40	0.23	3.50	99.22	55.73
38 2	379	53679	1.37	0.18	3.42	99.40	59.15
414	296	31357	1.03	0.10	2.58	99.50	61.73
447	242	23645	0.99	0.08	2.46	99.58	64.19
479	241	22429	1.16	0.07	2.90	99.65	67.10
512	197	16752	1.06	0.05	2.66	99.70	69.76
545	195	16512	1.27	0.05	3.13	99.76	72.93
5 7 8	213	16266	1.50	0.05	3.75	99.81	76.69
611	191	12934	1.42	0.04	3.54	99.35	80.23
644	186	12774	1.65	0.04	4.11	99.39	84.34
677	141	11313	1.70	0.04	4.25	99.93	88.59
710	112	7278	1.27	0.02	3.16	99.95	91.75
743	87	5543	1.11	0.02	2.77	99.97	94.52
776	56	3563	0.81	0.01	2.04	99.98	96.56
309	37	249 8	0.65	0.01	1.52	99.99	98.18
842	21	1440	0.42	0.00	1.06	100.00	99.24
875	7	564	0.22	0.00	0.55	100.00	99.78
9 08	3	172	0.06	0.00	0.16	100.00	99.94
941	1	5 4	0.02	0.00	0.06	100.00	100.00
974	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		3.06E 07	40.04				

TOTAL RAW PARTICLES.... 24317/31063-- 78.28%

NUMBER MEAN DIAMETER... 81.70 MICROMETERS S.D.... 65.00

VOLUME MEAN DIAMETER... 135.68 MICROMETERS S.D.... 252.99

SAUTER MEAN DIAMETER... 229.15 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 119.24 MICROMETERS D_{V0.5}... 302.26 MICROMETERS R.S.... 1.89 D_{V0.9}... 154.12 MICROMETERS D_{V0.9}... 691.21 MICROMETERS

Reference #11

DTG 84/08/22 16:16:00

DFM=1.0--4.0 MHz

UPPER						ACCU:	AULATED
LIMIT	H (RAW)	N/SEC	qm/SEC	<u>8_11</u>	3 VOL.	<u>8 </u>	& VOL.
56	4769	1.14E 07	0.38	45.34	0.75	45.34	0.75
8 9	13043	4.69E 06	0.93	18.57	1.85	63.91	2.60
122	11339	3.58E 06	2.17	14.18	4.32	78.09	6.92
154	7232	2.32E 06	3.18	9.21	6.32	87.30	13.25
187	396 7	1.24E 06	3.21	4.91	6.38	92.21	19.63
219	2589	697128	3.05	2.76	6.06	94.97	25.69
2 52	206 7	450504	3.07	1.78	6.10	96 .7 5	31.80
284	1569	270862	2.72	1.07	5.41	97.82	37.21
318	1074	144310	2.07		4.13	98.40	
351	7 93	91228	1.78	0.36	3.55	98.76	44.89
382	614	52596	1.34	0.21	2.67	98.97	47.56
414	454	48283	1.59	0.19	3.16	99.16	50.72
447	423	36658	1.53	0.15	3.04	99.30	53.76
4 7 9 512	363	25531	1.32	0.10 0.11	2.63 3.40	99.40 99.51	56.39 59.79
545	335 322	26857	1.71 1.42	0.11	2.83	99.51	62.62
5 7 8	289	18491 160 7 1	1.42	0.06	2.95	99.65	65.57
611	279	13818	1.51	0.05	3.01	99.70	68.59
644	284	13742	1.77	0.05	3.52	99.76	72.11
677	269	11432	1.72	0.05	3.42	99.80	75.53
710	277	11319	1.97	0.04	3.92	99.85	79.45
743	273	10701	2.14	0.04	4.26	99.89	83.71
776	204	8914	2.04	0.04	4.05	99.92	87.76
809	165	6100	1.58	0.02	3.15	99.95	90.91
842	126	4850	1.42	0.02	2.83	99.97	93.75
875	78	3186	1.05	0.01	2.09	99.98	95.84
908	52	2271	0.84	0.01	1.67	99.99	97.51
941	23	1171	0.48	0.00	0.96	99.99	98.47
974	21	1093	0.50	0.00	1.00	100.00	99.47
1007	4	147	0.07	0.00	0.15	100.00	99.62
1040	3	96	0.05	0.00	0.11	100.00	99.73
1073	1	31	0.02	0.00	0.04	100.00	99.77
1106	2	60	0.04	0.00	0.08	100.00	99.35
1139	2	59 22	0.05	0.00	0.10	100.00	99.95
1172 1205	1 0	32	0.03	0.00	0.05	100.00	
	U	0	0.00	0.00	J.00	100.00	100.00
TOTALS		2.52E 07	50.27				

TOTAL RAW PARTICLES.... 53306/69852-- 76.31%

NUMBER MEAN DIAMETER... 89.43 MICROHETERS S.D.... 75.01

VOLUME MEAN DIAMETER... 156.16 MICROMETERS S.D.... 295.41

SAUTER MEAN DIAMETER... 276.43 MICROMETERS

DTG 84/08/23 10:35:00

DFM=1.0--4.0 MHz

UPPER						ACCU!	MULATED
LIMIT	N(RAW)	N/SEC	<u>gm/SEC</u>	8 7.1	& VOL.	₹ <u>1</u>	%_VOL.
56	3066	7.24E 06	0.24	46.22	0.50	46.22	0.50
89	7620	2.68E 06	0.53	17.09	1.11	63.31	1.61
122	6746	2.13E 06	1.29	13.59	2.71	76.90	4.32
154	4088	1.52E 06	2.08	9.68	4.34	86.58	8.67
187	1936	810444	2.10	5.17	4.39	91.75	13.06
219	1083	451317	1.97	2.88	4.13	94.63	17.19
252	655	260978	1.78	1.67	3.72	96.29	20.91
284	440	160776	1.61	1.03	3.38	97.32	24.29
318	295	80176	1.15	0.51	2.41	97.83	26.71
351	226	61373	1.20	0.39	2.51	98.22	29.22
382	187	45104	1.15	0.29	2.41	98.51	31.63
414	151	29010	0.96	0.19	2.00	98.70	33.63
447	127	21534	0.90	0.14	1.88	98.83	35.51
479	134	22,262	1.15	0.14	2.42	93.98	37.93
512	126	21338	1.36	0.14	2.84	99.11	40.77
545	124	16025	1.23	0.10	2.58	99.21	43.35
578	115	12317	1.14	0.08	2.38	99.29	45.73
611	103	13160	1.44	0.08	3.02	99.38	48.75
644	109	8819	1.14	0.06	2.38	99.43	51.13
677	111	11480	1.73	0.07	3.61	99.51	54.75
710 743	135	12934	2.25	0.08	4.71	99.59	59.46
776	128 115	13244 11622	2.65	0.08 0.07	5.55 5.56	99.67	65.01 70.57
809	97	8367	2.66 2.17	0.07	4.55	99.75 99.80	75.13
842	67	- 6168	1.81	0.04	3.79	99.84	78.92
875	77	7124	2.35	0.04	4.93	99.89	83.85
908	56	6299	2.33	0.04	4.88	99.93	88.72
941	47	5480	2.26	0.03	4.73	99.96	93.46
974	22	3136	1.44	0.02	3.01	99.93	96.47
1007	11	1291	0.56	0.01	1.37	99.99	97.84
1040	7	1011	0.57	0.01	1.19	100.00	99.03
1073	0	0	0.00	0.00	0.00	100.00	99.03
1106	ì	6 3 2	0.43	0.00	0.89	100.00	99.92
1139	Ō	0	0.00	0.00	0.00	100.00	99.92
1172	1	48	0.04	0.00	0.03	100.00	100.00
1205	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.57E 07	47.76				

TOTAL RAW PARTICLES.... 28206/40650-- 69.39%

NUMBER MEAN DIAMETER... 92.54 MICROMETERS S.D.... 38.32

VOLUME MEAN DIAMETER... 179.95 MICROMETERS S.D.... 349.23

SAUTER MEAN DIAMETER... 356.12 MICROMETERS

D_{N0.5}... 63.57 MICROMETERS D_{V0.5}... 627.80 MICROMETERS D_{V0.5}... 627.80 MICROMETERS D_{V0.9}... 176.11 MICROMETERS D_{V0.9}... 916.39 MICROMETERS

Spray P Airspee Flow Ra Tank Mi FILE: C	te	40 ps 110 m 1 gpm Gypchec	ph k	AVG DFM BAR Dista Samp Numbe Numbe Scan	ance to I le Interver of Sar er of Sca Spacing Length	100 1 cm 1.5 Probe 20 c val 3 se mples 60 ans 9 3 cm	m. C.
UPPER LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	ACCUMU % N	
M	11(1431)	M, OLO	G.1., O.2.0	70 21	.0 .02.		
56	775	2.20E+07	0.72	41.86		41.86	0.87
89	850	6.22E+06	1.24	11.83		53.68	2.35
122	918	6.39 E+0 6	3.88	12.16		65.84	7.00
154	938	6.52 E+0 6	8.92	12.41	10.70	78.24	17.70
187	766	4.49E+06	11.61	8.54		86.78	31.62
220	664	2.91 E+0 6	12.73	5.54			46.88
252	593	1.71E+06	11.64	3.25	13.95	95.57	
284	572	1.18E+06	11.81	2.24		97.81	74.99
318	413	702987	10.11	1.34	12.12	99.14	87.11
351	186	267532	5.23	0.51	6.27	99.65	93.38
382	79	115794	2.96	0.22	3.54	99.87	96.92
414	30	39568	1.30	0.08	1.56	99.95	98.49
447	12	16269	0.68	0.03	0.81	99.98	99.30
479	4	11225	0.58	0.02	0.70	100.00	100.00
512	0	58	0.00	0.00	0.00	100.00	100.00
TOTAL 6	.80E+03	5.26E+07	83.42				
mom1.							
TOTAL A	CCEPTED RAI	W PARTICLE	s / Total I	MAGES =	6801/	10665 = 6	3.8%
NUMBER	MEAN DIA.=	D	101.58 µm				
VOLUME	MEAN DIA.=	$D_{00}^{10}\dots$	144.77 jum				
SAUTER	MEAN DIA.= MEAN DIA.=	D ₃₂	196.41 µm				
		D.,	<56 µm				
NUMBER	MEDIAN DIA	$=D_{N-1}^{N-1}$	78.99 jum				
	MEDIAN DIA	$D_{N.9}^{N.5}$	206.08 µm				
		D.,	130.85 um				
VOLUME	MEDIAN DIA	.=D.	226.88 11m				
	MEDIAN DIA	D	333.52 Lm				
		V.9					
RELATIV	E SPAN= 0	.89					

Slice Rate

4 MHz

Nozzle

8010

Nozzle 8010 Angle to Airstream 90 degrees Spray Pressure 40 psi Airspeed 135 mph Flow Rate 1 gpm Tank Mix TM Biocontrol FILE: C:\PMS\DATA\03059109.000 Number of Tests Combined: 3				Slice Rate 4 MHz AVG 100 DFM 1 cm. BAR 1.5 Distance to Probe 20 cm. Sample Interval 3 sec. Number of Samples 60 Number of Scans 9 Scan Spacing 3 cm. Scan Length 17 cm.				
UPPER						ΔCCTIMI	JLATED	
LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.	
	14/1/234)	14/ 3130	CIII) DEC	70 IV	70 VOLI.	20 11	70 VOLI.	
56	707	2.01E+07	0.66	46.83				
89	946	5.76E+06	1.15	13.42			3.18	
122	621	4.63E+06	2.81	10.79				
154	704	4.25E+06	5.81	9.89				
187	716	3.23E+06	8.36	7.52	14.71	88.45		
220	630	2.15E+06	9.40	5.00				
252	638	1.50E+06	10.21	3.49	17.97	96.95	67.59	
284	363	778239	7.82	1.81	13.76	98.76	81.35	
318	151	255273	3.67	0.59	6.46	99.36	87.81	
351	82	155068	3.03	0.36	5.34	99.72	93.15	
382	35	60664	1.55	0.14	2.73	99.86	95.88	
414	22	43211	1.42	0.10	2.50	99.96	98.38	
447	10	8723	0.36	0.02				
479	4	2186	0.11	0.01				
512	2	6628	0.42	0.02				
545	1	234	0.02	0.00				
578	ō	27	0.00	0.00	0.00	100.00	100.00	
_			0.00	0.00	0.00	100.00	100.00	
TOTAL 5	.63E+03	4.29E+07	56.81					
		PARTICLE D ₁₀ D ₃₀ D ₃₂	23 / TOTAL I 93.47 µm 136.26 µm 189.15 µm	MAGES =	5634/	8880.333	= 63.4%	
NUMBER	MEDIAN DI	$A = D_{N.1} \dots D_{N.5} \dots D_{N.9}$	64.08 µm 197.09 µm					
		D,,	127.62 um					
VOLUME	MEDIAN DI	$A = D_{\cdots}^{\vee \cdot 1}$	220.20 um					
		DV.1 DV.5 DV.9	331 .81 1m					
		-v.9	- σ μιι					
RELATIV	E SPAN= (0.93						

8010 FF,0 Degrees,40 psi,50 mph, 1.0 gpm, Water

DTG 83/04/27 13:57:02

DFM=1.0--2.0 MHz

UPPER						ACCUM	MULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	N N	& VOL.	8 N	% VOL.
56	2569	4.79E 06	0.16	53.14	0.31	53.14	0.31
89	4368	1.10E 06	0.22	12.24	0.43	65.38	0.75
122	4105	806700	0.49	8.94	0.97	74.32	1.72
154	2760	612001	0.84	6.78	1.66	81.10	3.37
187	1466	370128	0.96	4.10	1.90	85.20	5.27
219	947	26 216 5	1.15	2.91	2.27	88.11	7.54
252	660	170671	1.16	1.89	2.30	90.00	9.84
284	551	181013	1.82	2.01	3.60	92.01	13.44
318	391	133017	1.91	1.47	3.79	93.48	17.23
351	345	112315	2.20	1.24	4.35	94.73	21.58
382	308	78809	2.01	0.87	3.98	95.60	25.56
414	245	85813	2.83	0.95	5.59	96.55	31.16
447	201	61091	2.55	0.68	5.04	97.23	36.20
479	143	37981	1.97	0.42	3.90	97.65	40.10
512	134	34572	2.20	0.38	4.35	98.03	44.45
545	129	39382	3.03	0.44	6.00	98.47	50.45
578	104	33077	3.05	0.37	6.05	98.83	56.50
611	83	18753	2.06	0.21	4.07	99.04	60.57
644	61	19721	2.54	0.22	5.03	99.26	65.61
677	64	18256	2.75	0.20	5.44	99.46	71.04
710	43	12525	2.18	0.14	4.32	99.60	75.36
743	17	8219	1.64	0.09	3.26	99.69	78.61
7 76	20	4323	0.99	0.05	1.96	99.74	80.57
809	16	11874	3.09	0.13	6.11	99.87	86.68
842	8	983	0.29	0.01	0.57	99.88	87.25
875	9	846	0.28	0.01	0.55	99.89	87.81
908	2	1129	0.42	0.01	0.83	99.91	88.63
941	2	441	0.18	0.00	0.36	99.91	88.99
974	2	797	0.37	0.01	0.72	99.92	89.72
1007	0	0	0.00	0.00	0.00	99.92	89.72
1040	1	350	0.20	0.00	0.39	99.92	90.10
1073	0	0	0.00	0.00	0.00	99.92	90.10
1106	1	4689	3.17	0.05	6.27	99.97	96.38
1139	1	161	0.12	0.00	0.24	99.98	96.61
1172	1	2103	1.69	0.02	3.36	100.00	99.97
1205	0	0	0.00	0.00	0.00	100.00	99.97
1238	1	18	0.02	0.00	0.03	100.00	100.00
1271	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		9.02E 06	50.50				

TOTAL RAW PARTICLES.... 19758/23914-- 82.62%

NUMBER MEAN DIAMETER... 106.43 MICROMETERS S.D.... 119.40

VOLUME MEAN DIAMETER... 220.37 MICROMETERS S.D.... 383.29

SAUTER MEAN DIAMETER... 418.30 MICROMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 253.22 MICROMETERS $D_{V0.5}...$ 542.34 MICROMETERS $D_{V0.5}...$ 1.43 $D_{V0.9}...$ 252.44 MICROMETERS $D_{V0.9}...$ 1030.60 MICROMETERS

8010 FF,90 Degrees,40 psi,50 mph, 1.0 gpm, Water DTG 83/05/20 11:26:36

DFM=2.0--1.8 MHz

UPPER						ACCUM	MULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	<u>8 N</u>	%_VCL.	<u>8 N</u>	%_VOL.
56	3033	1.28E 07	0.42	52.99	0.58	52.99	0.58
89	4804	3.75E 06	0.75	15.53	1.02	68.52	1.60
122	4427	1.75E 06	1.07	7.26	1.46	75.78	3.06
154	3781	1.73E 06	2.37	7.16	3.24	82.94	6.30
187	3157	1.21E 06	3.13	5.00	4.28	87.94	10.58
219	2274	786166	3.44	3.25	4.71	91.19	15.29
252	1508	492038	3.35	2.04	4.59	93.23	19.89
284	1142	368661	3.70	1.53	5.07	94.75	24.96
318	8 76	247681	3.56	1.03	4.88	95.78	29.84
351	703	243714	4.77	1.01	6.53	96.79	36.38
382	542	203866	5.20	0.84	7.13	97.63	43.51
414	384	148345	4.88	0.61	6.69	98.25	50.20
447	291	96250	4.01	0.40	5.50	98.65	55.70
479	231	71386	3.70	0.30	5.07	98.94	60.77
512	223	69425	4.41	0.29	6.05	99.23	66.82
545	161	35813	2.76	0.15	3.78	99.38	70.60
5 7 8	145	40303	3.72	0.17	5.10	99.54	75.70
611	144	32418	3.55	0.13	4.87	99.68	80.57
644	1 26	22302	2.88	0.09	3.94	99.77	84.50
6 7 7	89	13149	1.98	0.05	2.71	99.82	87.21
710	91	18130	3.16	30.0	4.32	99.90	91.54
743	56	6713	1.34	0.63	1.84	99.93	93.38
7 76	37	5958	1.36	0.02	1.87	99.95	95.25
809	24	4517	1.17	0.02	1.61	99.97	96.86
842	21	3456	1.01	0.01	1.39	99.98	98.25
875	6	2121	0.70	0.01	0.96	99.99	99.21
908	6	1259	0.47	0.01	0.64	100.00	99.84
941	1	214	0.09	0.00	0.12	100.00	99.97
974	2	55	0.03	0.00	0.03	100.00	100.00
1007	0	0	_0.00	0.00	0.00	100.00	100.00
TOTALS		2.42E 07	72.97				

TOTAL RAW PARTICLES.... 28285/34433-- 82.15%

NUMBER MEAN DIAMETER... 95.08 MICROMETERS S.D.... 94.96

VOLUME MEAN DIAMETER... 179.42 MICROMETERS S.D.... 299.22

SAUTER MEAN DIAMETER... 319.88 MICROMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 182.78 MICROMETERS $D_{V0.5}...$ 413.98 MICROMETERS $D_{V0.5}...$ 1.24 $D_{V0.9}...$ 697.76 MICROMETERS

Reference #4

8010 FF,135 Degrees,40 psi,50 mph, 1.0 gpm, Water DTG 81/05/01 14:15:14

DFM=2.0--1.5 MHz

UPPER						ACCUN	ULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>₹ N</u>	%_VCL.	<u>₹ _N</u>	% VOL.
56	3058	1.61E 07	0.53	54.26	0.81	54.26	0.81
89	3276	3.93E 06	0.78	13.24	1.19	67.50	2.00
122	3516	2.22E 06	1.35	7.48	2.05	74.98	4.05
154	4084	2.36E 06	3.23	7.97	4.93	82 .9 5	8.97
187	4057	1.64E 06	4.24	5.52	6.46	88.47	15.43
219	3345	999718	4.37	3.37	6.66	91.84	22.09
252	2748	635700	4.33	2.14	6.60	93.98	28.69
284	2280	481461	4.84	1.62	7.37	95.60	36.05
318	1856	355711	5.11	1.20	7.79	96.80	43.84
351	1477	26 5 7 5 0	5.20	0.90	7.92	97.70	51.77
382	1128	185617	4.76	0.63	7.26	98.33	59.03
414	1014	140388	4.62	0.47	7.04	98.80	66.07
447	86 7	110575	4.61	0.37	7.02	99.18	73.09
479	853	89716	4.65	0.30	7.09	99.48	80.18
512	714	63980	4.07	0.22	6.20	99.69	86.37
545	461	39780	3.06	0.13	4.67	99.83	91.04
578	351	24654	2.28	0.08	3.47	99.91	94.51
611	210	12105	1.33	0.04	2.02	99.95	96.53
644	131	7272	0.94	0.02	1.43	99.98	97.96
677	67	2827	0.43	0.01	0.65	99.99	98.60
710	39	2146	0.37	0.01	0.57	99.99	99.17
743 7 7 6	23 14	782 451	0.16 0.10	0.00 0.00	0.24 0.16	100.00	99.41 99.57
809	7	282	0.10	0.00	0.10	100.00	99.68
842	4	92	0.03	0.00	0.04	100.00	99.72
875	2	41	0.01	0.00	0.02	100.00	99.74
908	1	167	0.06	0.00	0.09	100.00	99.84
941	0	0	0.00	0.00	0.00	100.00	99.84
974	ì	236	0.11	0.00	0.16	100.00	100.00
1007	Õ	0	0.00	0.00	0.00	100.00	100.00
TOTALS		2.97E 07	65.64				

TOTAL RAW PARTICLES.... 35584/40563-- 87.73%

NUMBER MEAN DIAMETER... 92.26 MICROMETERS S.D.... 85.27

VOLUME MEAN DIAMETER... 161.75 MICROMETERS S.D.... 252.63

SAUTER MEAN DIAMETER... 268.14 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 159.52 MICROMETERS

D_{N0.5}... 0.00 MICROMETERS D_{V0.5}... 343.93 MICROMETERS R.S.... 1.10

 $D_{N0.9...}$ 201.96 MICROMETERS $D_{V0.9...}$ 537.49 MICROMETERS

Reference #4

8010 FF,0 Degrees,40 psi,100 mph, 1.0 gpm, Water DTG 83/04/27 14:25:21

DFM=1.0--3.0 MHz

UPPER						ACCU	ULATED
LIMIT	N(RAW)	M/SEC	qm/SEC	<u>₹ 7</u>	% VOL.	<u>₹_N</u>	%_VOL.
56	1236	4.66E 06	0.15	36.69	0.20	36.69	0.20
89	26 0 7	1.62€ 06	0.32	12.74	0.41	49.43	0.51
122	2911	1.570 06	0.96	12.39	1.23	61.82	1.84
154	2380	1.32E 06	1.80	10.37	2.32	72.19	4.16
187	1610	935206	2.42	7.37	3.12	79.56	7.29
219	1104	564810	2.47	4.45	3.13	84.01	10.47
252	780	495042	3.37	3.90	4.35	87.91	14.82
284	6 4 6	400359	4.02	3.15	5.18	91.06	20.00
318	508	258350	3.71	2.04	4.79	93.10	24.79
351	379	169488	3.32	1.34	4.27	94.44	29.06
382	241	161533	4.12	1.27	5 .32	95 .7 1	34.37
414	185	93416	3.08	0.74	3.96	96.44	38.34
447	160	6 38 56	2.66	0.50	3.43	96.9 5	41.77
479	108	68472	3.55	0.54	4.58	97.49	46.35
512	73	24065	1.53	0.19	1.97	97.68	48.32
545	91	86 316	6.65	9.68	8.56	98.36	56.88
578	105	47576	4.39	0.37	5.66	98.73	62.54
611	61	39282	4.31	0.31	5.5 5	99.04	68.09
644	57	20530	2.65	0.16	3.41	99.20	71.51
677	54	21269	3.20	0.17	4.12	99.37	75.63
710	32	11046	1.92	0.09	2.48	99.46	78.11
743	29	27223	5.45	0.21	7.02	99.57	85.13
776	21	2 26 7 4	5 . 19	0.18	6.68	99.85	91.81
809	16	4170	1.08	0.03	1.40	99.88	93.21
842	11	6 3 8 2	1.87	0.05	2.42	99.93	95.62
875	7	1667	0.55	0.01	0.71	99.95	96.33
908	7	4556	1.69	0.04	2.17	99.98	98.51
941	4	454	0.19	0.00	0.24	99.99	98.75
974	3	605	0.28	0.00	0.36	99.99	99.10
1007		821	0.42	0.01	0.54	100.00	99.64
1040	0	0	0.00	0.00	0.00	100.00	99.64
1073	1	452	0.28	0.00	0.36	100.00	100.00
1106	0	0	0.00	0.00	0.00	100.00	100.00

TOTAL RAW PARTICLES.... 15430/18982-- 81.29%

1.27E 07 77.58

NUMBER MEAN DIAMETER... 128.59 MICROMETERS S.D.... 120.11

VOLUME MEAN DIAMETER... 226.93 MICROMETERS S.D.... 358.52

SAUTER MEAN DIAMETER... 377.45 MICROMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 215.09 MICROMETERS $D_{V0.5}...$ 518.31 MICROMETERS $D_{V0.5}...$ 1.06 $D_{V0.9}...$ 273.65 MICROMETERS $D_{V0.9}...$ 766.56 MICROMETERS

Reference #4

TOTALS

8010 FF,90 Degrees,40 psi,100 mph, 1.0 gpm, Water D'IG 83/04/29 09:32:08

DFM=2.0--3.0 MHz

UPPER						ACCU	MULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>8 N</u>	% VOL.	<u>8 _N</u>	% VOL.
56	1293	2.24E 07	0.74	52.07	1.24	52.07	1.24
89	2045	6.79E 06	1.35	15.82	2.27	67.89	3.51
122	2780	3.92E 06	2.38	9.12	4.00	77.01	7.51
154	2318	3.06E 06	4.19	7.13	7.05	84.14	14.56
187	2298	2.58E 06	6.69	6.01	11.25	90.16	25.81
219	1 86 8	1.54E 06	6.74	3.59	11.34	93.75	37.15
252	1384	86 4772	5.89	2.01	9.91	95.76	47.07
284	1319	742709	7.46	1.73	12.55	97.49	59.62
318	1250	499099	7.17	1.16	12.07	98.66	71.69
351	833	232437	4.55	0.54	7.65	99.20	79.34
382	613	149294	3.81	0.35	6.41	99.54	85.75
414	413	97253	3.20	0.23	5.39	99.77	91.14
447	26 5	50841	2.12	0.12	3. 5 6	99.89	94.70
479	189	18475	0.96	0.04	1.61	99.93	96.31
512	122	16804	1.07	0.04	1.80	99.97	98.11
545	5 7	5965	0.46	0.01	0.77	99.99	98.88
578	30	3678	0.34	0.01	0.57	99.99	99.45
611	15	893	0.10	0.00	0.16	100.00	99.62
644	12	1062	0.14	0.00	0.23	100.00	99.85
677	3	76	0.01	0.00	0.02	100.00	99.87
710	3 3 1	434	0.08	0.00	0.13	100.00	100.00
743	1	11	0.00	0.00	0.00	100.00	100.00
776	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		4.29E 07	59.44				

TOTAL RAW PARTICLES.... 19111/24496-- 78.02%

NUMBER MEAN DIAMETER... 87.04 MICROMETERS S.D.... 70.74

VOLUME MEAN DIAMETER... 138.33 MICROMETERS S.D.... 202.01

SAUTER MEAN DIAMETER... 210.39 MICROMETERS

D_N0.1··· 0.00 MICROMETERS D_{V0.1}... 133.26 MICROMETERS D_{N0.5}... 0.00 MICROMETERS D_{V0.5}... 259.51 MICROMETERS

D_{NO.9}... 186.41 MICROMETERS D_{V0.9}... 408.01 MICROMETERS

R.S.... 1.06

Reference #4

DTG 83/05/06 13:36:23

DFM=2.0--3.0 MHz

UPPER						ACCUN	ULATED	
LIMIT	N (RAW)	N/SEC	qm/SEC	<u>8 N</u>	% VOL.	<u>% N</u>	%_VOL.	
56	853	2.32E 07	0.76	48.59	1.42	48.59	1.42	
89	1166	7.79E 06	1.55	16.30	2.89	64.89	4.31	
122	2157	4.08E 06	2.48	8.54	4.62	73.43		
154	2197	4.92E 06	6.73	10.29	12.53	83.72	21.46	
187	2319	3.65E 06	9.44	7.63	17.59	91.35	39.05	
219	21 56	1.88E 06				95.27		
252	1751	915771	6.24			97.19		
284			6.95			98.63		
318	1404	4 26 300		0.89	11.41	99.53	90.31	
351			2.58	0.28	4.80	99.80	95.10	
382		77864	1.99			99.96		
414		13258		0.03		99.99		
		2514	0.10				99.82	
	13		0.04				99.89	
512	10	448	0.03			100.00	99.95	
545	4	278	0.02				99.99	
5 7 8	2	71	0.01	0.00			100.00	
611	0	0	_0.00	0.00	0.00	100.00	100.00	
TOTALS		4.78E 07	53.69					
TOTAL R	AW PARTI	CLES	16780/2117	70 79.	26 % .			
NUMBER	MEAN DIA	METER	87.99 MIC	ROMETERS	S.D	64.10		
VOLUME	MEAN DIA	METER 1	29.01 MICI	ROMETERS	S.D	. 171.91		
SAUTER	MEAN DIA	METER 1	81.19 MIC	ROMETERS				

D_{V0.1}... 124.43 MICROMETERS D_{V0.5}... 210.59 MICROMETERS

D_{V0.9}... 316.41 MICROMETERS

R.S.... 0.91

Reference #4

DNO.9... 181.45 MICROMETERS

D_N0.1···

D_{N0.5}...

0.00 MICROMETERS

59.13 MICROMETERS

Angle to Airstre Spray Pressure Airspeed Flow Rate Tank Mix	40 ps. 110 m 1 gpm Water CA\03059117.	DFM 1 cm.				
UPPER					ACCUMU	ר איזיביים
LIMIT N(RAW)	N/SEC	Gm/SEC	% N	% VOL.		
00						
56 850	2.02E+07	0.66	41 22	1.01	41 22	1.01
89 950		1.38		2.10		
122 905		3.85		5.87		8.98
154 1069		8.49		12.93		
187 796			8.42			
220 684			4.76			
252 530	1.27E+06	8.69	2.60	13.24	96.78	66.93
284 433		8.48	1.72			79.85
318 292		6.65				
	182058			5.43		
	44751			1.74	99.91	97.15
414 13	19651				99.95	
447 3	5226	0.22	0.01	0.33	99.96	98.46
479 7	19435	1.01	0.04	1.54	100.00	100.00
TOTAL 6.67E+03	4.90E+07	65.63				
TOTAL ACCEPTED R	NAW PARTICLES	S / TOTAL I	MAGES =	6665/	11337 = 5	8.8%
NUMBER MEAN DIA. VOLUME MEAN DIA. SAUTER MEAN DIA.	= D ₁₀ = D ₃₀ = D ₃₂	97.28 µm 136.85 µm 184.63 µm				
NUMBER MEDIAN DI	$\begin{array}{c} D_{N.1} \dots \\ D_{N.5} \dots \\ D_{N.9} \dots \end{array}$	mu, 56> mu, 76.74 mu, 190.95				
VOLUME MEDIAN DI	$\begin{array}{c} D_{V.1} \dots \\ D_{V.5} \dots \\ D_{V.9} \dots \end{array}$	124.20 µm 212.05 µm 318.42 µm				
RELATIVE SPAN=	0.92					
Reference	₩ 2					

Nozzle 8010 Angle to Airstream 90 degrees Spray Pressure 40 psi Airspeed 135 mph Flow Rate 1 gpm Tank Mix Water FILE: C:\PMS\DATA\03059108.000 Number of Tests Combined: 4						ance to l le Inter er of Sar er of Sca Spacing Length	100 1 cm 1.5 Probe 20 ca val 3 sec mples 60 ans 9 3 cm	n. c.
UPPER							ACCUMU	ר.מיינים
LIMIT E/	N(RAW)	N/SEC	Gm/:	SEC	% N	% VOL.		% VOL.
56	760	1.71E+07		0.56	38.83	0.81	38.83	0.81
89	954	5.72E+06		1.14	12.98		51.81	2.44
122	825	5.77E+06		3.51	13.11			7.48
154	885	5.21E+06		7.13	11.82			17.73
187	903	4.14E+06		10.72	9.40			33.14
220	753	2.54E+06		11.10	5.76			49.11
252	735 875	1.86E÷06		12.78	4.26			67.47
284		1.08E+06		10.82			98.60	83.02
	597				2.44			
318	223	339082		4.87	0.77			90.03
351	100	161638		3.16	0.37			94.58
382	48	63898		1.63	0.15		99.88	96.92
414	17	21720		0.72	0.05		99.93	97.95
447	13	20128		0.84	0.05			99.16
479	4	4158		0.22	0.01			99.47
512	4	4351		0.28	0.01			99.87
545	1	423		0.03	0.00		100.00	99.91
578	1	231		0.02	0.00			99.94
611	1	365		0.04	0.00	0.06	100.00	100.00
TOTAL 6	.96E+03	4.41E+07	69	.55				
ΤΩΤΑΤ. Δ	CCEPTED RAI	W PARTICIE	ירי / פי	∩ጥልτ. ገ	MAGES -	6050/	10527.5 =	66 1%
					L'AOLO -	09397	10021.5	00.1%
NONDER	MEAN DIA.=	D ₁₀	103.1	2 pm				
VOLUME	MEAN DIA.=	_30	144.5	3 µm				
SAUTER	MEAN DIA.= MEAN DIA.= MEAN DIA.=	D ₃₂	192.0	3 pm				
		D	45	6 1m				
NUMBER	MEDIAN DIA	$=D^{N.1}$	84 6	7 1m				
110. 111.	MEDIAN DIA	$D_{N.5}$	200.0	1 1 1 1 1 1				
		м.9	209.0	T hiii				
		ח	129 7	1 1m				
VOLUME	MEDIAN DIA	=DV.1	223.1	1 17m				
	MEDIAN DIA	DV.5	317 1	5 1m				
		V.9	J11.1	o puit				

8010 FF,0 Degrees,40 psi,150 mph, 1.0 gpm, Water DTG 83/04/27 14:45:38

DFM=1.0--4.0 MHz

UPPER LIMIT	N (RAW)	N/SEC	qm/SEC	8 N	NOL.		MULATED
						N	VOL.
56	512	5.86E 06	0.19	36.31	0.47	36.31	0.47
89	1758	2.36E 06	0.47	14.62	1.16	50.94	1.63
122	2019	2.27E 06	1.38	14.04	3.39	64.97	5.02
154	1738	1.83E 06	2.51	11.35	6.17	76.32	11.19
187	1178	1.30E 06	3.35	8.02	8.26	84.35	19.45
219	970	911280 634273	3.98 4.32	5.64 3.93	9.81 10.64	89.99	29.25
252 284	829 48 1	337456	3.39	2.09	8.34	93.92	39.89
318	267	253002	3.64	1.57	8.95	96.01 97.57	48.23 57.18
351	143	124682	2.44	0.77	6.00	98.34	63.19
382	128	102052	2.61	0.63	6.41	98.98	69.60
414	79	28278	0.93	0.18	2.29	99.15	71.89
447	82	38258	1.59	0.24	3.92	99.39	75.82
479	54	18481	0.96	0.11	2.36	99.50	78.17
512	26	11643	0.74	0.07	1.82	99.57	80.00
545	25	21453	1.65	0.13	4.06	99.71	84.06
578	13	32366	2.99	0.20	7.36	99.91	91.42
611	13	2014	0.22	0.01	0.54	99.92	91.96
644	8	4928	0.64	0.03	1.56	99.95	93.52
677	2	598	0.09	0.00	0.22	99.95	93.75
710	2	222	0.04	0.00	0.10	99.96	93.84
743	5	4718	0.94	0.03	2.32	99.98	96.16
776	1	70	0.02	0.00	0.04	99.99	96.20
809	1	72	0.02	0.00	0.05	99.99	96.25
842	3	1488	0.44	0.01	1.08	99.99	97.33
875	1	13	0.00	0.00	0.01	99 .9 9	97.34
908	1	78	0.03	0.00	0.07	100.00	97.41
941	0	0	0.00	0.00	0.00	100.00	97.41
974	0	0	0.00	0.00	0.00	100.00	97.41
1007	0	0	0.00	0.00	0.00	100.00	97.41
1040	0	0	0.00	0.00	0.00	100.00	97.41
1073	0	0	0.00	0.00	0.00	100.00	97.41
1106	0	0	0.00	0.00	0.00	100.00	97.41
1139	0	0	0.00	0.00	0.00	100.00	97.41
1172	0	0	0.00	0.00	0.00	100.00	97.41
1205	0	0	0.00	0.00	0.00	100.00	97.41
1238	0	0 0	0.00	0.00	0.00	100.00	97.41
1271 1304	0	0	0.00 0.00	0.00	0.00 0.00	100.00	97.41 97.41
1337	0	0	0.00	0.00	0.00	100.00	97.41
1370	0	0	0.00	0.00	0.00	100.00	97.41
1403	ì	757	1.05	0.00	2.59	100.00	100.00
1436	Ō	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.62E 07	40.63				

TOTAL RAW PARTICLES.... 10340/13244-- 78.07%

NUMBER MEAN DIAMETER... 110.10 MICROMETERS S.D.... 83.84

VOLUME MEAN DIAMETER... 168.81 MICROMETERS S.D.... 291.07

SAUTER MEAN DIAMETER... 251.18 MICROMETERS

D_{N 0.1}... 0.00 MICROMETERS D_{V 0.1}... 148.24 MICROMETERS

D_{N0.5}... 87.15 MICROMETERS D_{V0.5}... 290.82 MICROMETERS R.S.... 1.45

D_{N0.9}... 219.55 MICROMETERS D_{V0.9}... 571.14 MICROMETERS

Reference #4

8010 FF,90 Degrees,40 psi,150 mph, 1.0 gpm, Water

DTG 83/05/04 14:20:30

DFM=2.0--4.0 MHz

UPPER						ACCU	MULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	8 N	%_VOL.	<u>8 N</u>	%_VOL.
56	691	2.58E 07	0.85	53.02	2.30	53.02	2.30
89	1063	8.19E 06	1.63	16.84	4.41	69.86	6.70
122	1692	3.60E 06	2.19	7.41	5.93	77.27	12.63
154	2007	4.89E 06	6.69	10.05	18.10	87.32	30.73
187	1721	3.23E 06	8.36	6.64	22.63	93.95	53.36
219	1407	1.79E 06	7.83	3.68	21.20	97.63	74.56
252	1126	844095	5.75	1.74	15.57	99.37	90.13
284	36 5	236015	2.37	0.49	6.42	99.85	96.54
318	110	31790	0.46	0.07	1.24	99.92	97.78
351	60	35220	0.69	0.07	1.87	99.99	99.65
382	21	3073	0.08	0.01	0.21	100.00	99.86
414	10	1017	0.03	0.00	0.09	100.00	99.95
447	1	346	0.01	0.00	0.04	100.00	99.99
479	3	6 7	0.00	0.00	0.01	100.00	100.00
512	0	0	0.00	0.00	0.00	100.00	100.00
545	1	10	0.00	0.00	0.00	100.00	100.00
578	0	0	_0.00	0.00	0.00	100.00	100.00
TOTALS		4.86E 07	36.94				

TOTAL RAW PARTICLES.... 10278/14202-- 72.37%

NUMBER MEAN DIAMETER... 79.55 MICROMETERS S.D.... 55.01

VOLUME MEAN DIAMETER... 113.23 MICROMETERS S.D.... 145.38

SAUTER MEAN DIAMETER... 155.21 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 107.29 MICROMETERS

D_{N0.5}... 0.00 MICROMETERS D_{V0.5}... 182.37 MICROMETERS R.S.... 0.79

D_{NO.9}... 167.63 MICROMETERS D_{VO.9}... 252.18 MICROMETERS

8010 FF,135 Degrees,40 psi,150 mph, 1.0 gpm, Water

DTG 83/05/06 13:48:28

DFM=2.0--4.0 MHz

UPPER						ACCU	MULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>8 N</u>	% VCL.	<u>₹ N</u>	%_VCL.
56	376	1.98E 07	0.65	45.48	1.90	45.48	1.90
89	835	8.41E 06	1.67	19.35	4.89	64.83	6.79
122	1557	4.19E 06	2.54	9.63	7.43	74.46	14.23
154	1852	5.19E 06	7.10	11.95	20.78	86.41	35.00
187	1772	3.40E 06	8.81	7.82	25 .76	94.23	60.77
219	1426	1.81E 06	7.91	4.16	23.14	98.40	83.91
252	965	545875	3.72	1.26	10.88	99.65	94.78
284	197	112681	1.13	0.26	3.31	99.91	98.09
318	41	31930	0.46	0.07	1.34	99.98	99.44
351	6	1684	0.03	0.00	0.10	99.99	99.53
382	6	2247	0.06	0.01	0.17	99.99	99.70
414	2	3106	0.10	0.01	0.30	100.00	100.00
447	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		4.35E 07	34.19			•	

TOTAL RAW PARTICLES.... 9035/12601-- 71.70%

NUMBER MEAN DIAMETER... 84.40 MICROMETERS S.D.... 53.86

VOLUME MEAN DIAMETER... 114.57 MICROMETERS S.D.... 140.36

SAUTER MEAN DIAMETER... 150.02 MICROMETERS

 $D_{N0.1...}$ 0.00 MICROMETERS $D_{V0.1...}$ 103.17 MICROMETERS

D_{N0.5}... 63.98 MICROMETERS D_{V0.5}... 173.49 MICROMETERS R.S.... 0.78

D_{N0.9}... 169.43 MICROMETERS D_{V0.9}... 237.94 MICROMETERS

8020 PP,0 Degrees,40 psi,50 mph , 2.0 gpm, Water

DTG 83/05/31 14:07:47

DFM=1.0--1.5 MHz

UPPER						A CCUA	ULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	8 N	NOL.	₽ N	NOL.
			0.42				
56	8776	1.29E 07		71.20	0.50	71.20	0.50
89	15860	1.53E 06	0.30	8.44	0.36	79.65	0.86
122	14255	1.03E 06	0.62	5.69	0.74	85.34	1.60
154	10205	788867	1.08	4.37	1.27	89.71	2.87
187	4712	409299	1.06	2.27	1.25	91.97	4.12
219	2729	250619	1.10	1.39	1.29	93.36	5.42
252	1881	198363	1.35	1.10	1.60	94.46	7.01
284	1385	153668	1.54	0.85	1.82	95.31	8.84
318	1091	138777	1.99 2.11	0.77 0.60	2.36 2.49	96.08	11.19
351	844	107775	2.11	0.44	2.49	96.67 97.11	13.68
382	744	796 39		0.41			16.08
414	573	74272	2.45 2.66	0.35	2.89 3.15	97.52 97.88	18.97 22.12
447	463 382	63904 48468	2.51	0.35	2.97	98.15	25.09
479 512	331	36 279	2.31	0.20	2.72	98.35	27.81
	299	43638	3.36	0.24	3.97	98.59	31.78
545 578	241	34356	3.30	0.19	3.75	98.78	35.53
611	246	27646	3.03	0.15	3.58	98.93	39.11
644	219	34395	4.43	0.19	5. 24	99.12	44.34
677	183	20088	3.02	0.11	3.57	99.23	47.91
710	176	34890	6.07	0.19	7.17	99.43	55.09
743	145	15988	3.20	0.09	3.78	99.51	58.86
776	99	11192	2.56	0.06	3.02	99.58	61.89
809	125	13717	3.56	0.08	4.21	99.65	66.10
842	81	6939	2.04	0.04	2.41	99.69	68.51
875	76	11632	3.84	0.06	4.54	99.75	73.04
908	48	5828	2.16	0.03	2.55	99.79	75.59
941	33	6217	2.57	0.03	3.03	99.82	78.62
974	33	19807	9.08	0.11	10.72	99.93	89.35
1007	19	1288	0.65	0.01	0.77	99.94	90.12
1040	12	925	0.52	0.01	0.61	99.94	90.73
1073	11	1613	0.99	0.01	1.17	99.95	91.90
1106	12	2420	1.63	0.01	1.93	99.97	93.83
1139	3	1455	1.07	0.01	1.27	99.97	95.10
1172	5	4033	3.25	0.02	3.84	100.00	98.94
1205	5	144	0.13	0.00	0.15	100.00	99.09
1238	1	54	0.05	0.00	0.06	100.00	99.15
1271	2	212	0.22	0.00	0.26	100.00	99.41
1304	0	0	0.00	0.00	0.00	100.00	99.41
1337	1	27	0.03	0.00	0.04	100.00	99.45
1370	1	35	0.05	0.00	0.05	100.00	99.50
1403	0	0	0.00	0.00	0.00	100.00	99.50
1436	0	0	0.00	0.00	0.00	100.00	99.50
1469	1	41	0.07	0.00	0.08	100.00	99.58
1502	1	208	0.36	0.00	0.42	100.00	100.00
1535	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.81E 07	84.66				

TOTAL RAW PARTICLES.... 66309/84564-- 78.41%

NUMBER MEAN DIAMETER... 80.80 MICROMETERS S.D.... 108.10

VOLUME MEAN DIAMETER... 207.70 MICROMETERS S.D.... 399.80

SAUTER MEAN DIAMETER... 491.88 MICROMETERS

Reference #4

8020 FF,90 Degrees,40 psi,50 mph , 2.0 gpm, Water

DTG 81/05/00 11:51:10

DFM=2.0--1.5 MHz

UPPER						ACCU	ULATED
LIMIT	N (RAW)	M/SEC	qm/SEC	8 N	NOL.	8 N	NOL.
56	3626	2.94E 07	0.97	57.79	0.66	57.79	0.66
89	5787	7.54E 06	1.50	14.81	1.02	72.60	1.67
122	5244	3.33E 06	2.02	6.53	1.37	79.13	3.04
154	4572	3.42E 06	4.68	6.72	3.17	85.85	6.21
187	3410	2.14E 06	5.53	4.19	3.75	90.04	9.96
219	2414	1.42E 06	6.21	2.79	4.21	92.83	14.16
252	1473	922951	6.29	1.81	4.26	94.64	18.42
284	1063	650873	6.54	1.28	4.43	95.92	22.85
318	744	466615	6.71	0.92	4.54	96.84	27.40
351	535	337080	6.59	0.66	4.47	97.50	31.87
382	384	241517	6.17	0.47	4.18	97.97	36.04
414	26 0	208326	6.86	0.41	4.65	98.38	40.69
447	187	179129	7.47	0.35	5. 06	98.73	45.75
479	129	126125	6.54	0.25	4.43	98.98	50.18
51 2	119	64856	4.12	0.13	2.79	99.11	52.97
545	122	88529	6.82	0.17	4.62	99.28	57.59
578	120	71717	6.62	0.14	4.49	99.42	62.08
611	105	39833	4.37	0.08	2.96	99.50	65.03
644	124	58982	7.60	0.12	5.15	99.62	70.18
677	119	33419	5.02	0.07	3.40	99.68	73.59
710	109	41401	7.21	0.08	4.88	99.76	78.47
743	99	32937	6.59	0.06	4.47	99.83	82.94
776	85	37007	8.46	0.07	5.73	99.90	88.67
809 842	68	11358	2.95	0.02	2.00 4.30	99.92 99.96	90.67
875	59 42	21616 5161	6.35 1.70	0.04 0.01	1.16	99.97	94.97 96.13
908	27	4634	1.71	0.01	1.16	99.98	97.29
941	13	4085	1.69	0.01	1.14	99.99	98.43
974	6	86 8	0.40	0.00	0.27	99.99	98.70
1007	8	1393	0.71	0.00	0.48	100.00	99.18
1040	Õ	0	0.00	0.00	0.00	100.00	99.18
1073	2	1043	0.64	0.00	0.44	100.00	99.61
1106	ō	0	0.00	0.00	0.00	100.00	99.61
1139	ì	274	0.20	0.00	0.14	100.00	99.75
1172	ī	4 26	0.34	0.00	0.23	100.00	99.98
1205	Ō	0	0.00	0.00	0.00	100.00	99.98
1238	0	0	0.00	0.00	0.00	100.00	99.98
1271	0	0	0.00	0.00	0.00	100.00	99.98
1304	1	24	0.03	0.00	0.02	100.00	100.00
1337	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		5.09E 07	147.60				

TOTAL RAW PARTICLES.... 31058/40556-- 76.58%

NUMBER MEAN DIAMETER... 87.71 MICROMETERS S.D.... 91.93

VOLUME MEAN DIAMETER... 176.94 MICROMETERS S.D.... 320.23

SAUTER MEAN DIAMETER... 343.18 MICROMETERS

DNO.1... 0.00 MICROMETERS DVO.1... 187.27 MICROMETERS

D_{N0.5}... 0.00 MICROMETERS D_{V0.5}... 478.49 MICROMETERS R.S.... 1.28

DNO.9... 186.93 MICROMETERS DVO.9... 797.44 MICROMETERS

Reference #4

8020 FF, 135 DEGREES, 40 PSI, 50 MPH, 2 gpm, Water D'IG 83/05/23 13:53:31

DFM=2.0--1.5 MHz

UPPER						ACCU	MULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	8 N	% VCL.	<u>₹ </u>	% VOL.
56	5668	1.94E 07	0.64	49.86	0.52	49.86	0.52
89	6324	5.53E 06	1.10	14.21	0.90	64.07	1.42
122	6413	3.23E 06	1.96	8.29	1.60	72.36	3.03
154	6808	2.97E 06	4.06	7.63	3.33	79.99	6.35
187	6753	2.24E 06	5.81	5.7 7	4.76	85.76	11.11
219	4961	1.50E 06	6.57	3.86	5.38	89.63	16.49
252	4180	1.04E 06	7.06	2.66	5.78	92.29	22.27
284	3 56 9	698389	7.01	1.79	5.74	94.08	28.01
318	2802	56 16 6 8	8.07	1.44	6.61	95.53	34.62
351	2117	406416	7.95	1.04	6.51	96.57	41.13
382	1635	305117	7.79	0.78	6.38	97.36	47.50
414	1409	244356	8.05	0.63	6.59	97.98	54.09
447	1318	211083	08.8	0.54	7.20	98.53	61.29
479	1277	169375	8.78	0.44	7.19	98.96	68.48
512	1080	125067	7.95	0.32	6.51	99.28	74.99
545	916	91808	7.07 5.64	0.24 0.16	5.79 4.62	99.52 99.68	80.77 85.39
578 611	690 539	61076 43724	4.79	0.16	3.92	99.00	89.31
644	388	34330	4.79	0.11	3.62	99.79	92.94
677	255	21765	3.27	0.06	2.68	99.93	95.62
710	184	13440	2.34	0.03	1.91	99.97	97.53
743	107	5296	1.06	0.01	0.87	99.98	98.40
776	71	3777	0.86	0.01	0.71	99.99	99.10
809	37	1701	0.44	0.00	0.36	100.00	99.47
842	17	574	0.17	0.00	0.14	100.00	99.60
875	īi	917	0.30	0.00	0.25	100.00	99.85
908	8	372	0.14	0.00	0.11	100.00	99.97
941	1	18	0.01	0.00	0.01	100.00	99.97
974	1	18	0.01	0.00	0.01	100.00	99.98
1007	0	0	0.00	0.00	0.00	100.CO	99.98
1040	0	0	0.00	0.00	0.00	100.00	99.98
1073	0	0	0.00	0.00	0.00	100.00	99.98
1106	0	0	0.00	0.00	C. 00	100.00	99.98
1139	0	0	0.00	0.00	0.00	100.00	99.98
1172	1	33	0.03	0.00	0.02	100.00	100.00
1205	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		3.89E 07	122.16				

TOTAL RAW PARTICLES.... 59540/71072-- 83.77%

NUMBER MEAN DIAMETER... 101.46 MICROMETERS S.D.... 96.85

VOLUME MEAN DIAMETER... 181.74 MICROMETERS S.D.... 284.65

SAUTER MEAN DIAMETER... 305.12 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 179.58 MICROMETERS D_{V0.5}... 394.48 MICROMETERS P.S.... 1.11 D_{N0.9}... 224.08 MICROMETERS D_{V0.9}... 616.75 MICROMETERS

8020 FF,0 Degrees,40 psi,100 mph, 2.0 gpm, Water

DTG 81/05/31 15:10:16

DFM=1.0--3.0 MHz

UPPER						ACCU	MULATED
LIMIT -	N (RAW)	M/SEC	qm/SEC	N	VOL.	<u> </u>	VOL.
56	3178	6.80E 06	0.22	45.90	0.24	45.90	0.24
89	7141	1.91E 06	0.38	12.93	0.41	58.83	0.64
122	76 06	1.59E 06	0.97	10.75	1.03	69.58	1.67
154	6435	1.23E 06	1.69	8.34	1.80	77.92	3.47
187	3970	783085	2.03	5.29	2.16	83.21	5.63
219	26 32	596 142	2.61	4.03	2.78	87.24	8.41
252 284	1761 1467	441740 312478	3.01 3.14	2.98 2.11	3.21 3.34	90.22 92.34	11.62
318	1220	271399	3.90	1.83	4.16	94.17	14.96 19.12
351	835	184229	3.60	1.24	3.84	95.41	22.96
382	550	137881	3.52	0.93	3.75	96.34	26.71
414	415	95873	3.16	0.65	3.36	96.99	30.07
447	339	45269	1.89	0.31	2.01	97.30	32.08
479	26 2	63107	3.27	0.43	3.49	97.72	35.57
512	228	40318	2.56	0.27	2.73	98.00	38.30
545	200	36185	2.79	0.24	2.97	98.24	41.27
578	194	49299	4.55	0.33	4.85	98.57	46.12
611	182	34105	3.74	0.23	3. 98	98.80	50.10
644	164	25424	3.28	0.17	3.49	98.98	53.59
677	144	25993	3.91	0.18	4. 16	99.15	57.76
710	113	17872	3.11	0.12	3.31	99.27	61.07
743 776	102 80	16 3 9 8 1 5 0 4 2	3.28 3.44	0.11 0.10	3.50 3.66	99.38 99.48	64.57 68.23
809	68	27389	7.12	0.10	7.58	99.67	75.81
842	57	12275	3.60	0.08	3.84	99.75	79.66
875	60	5982	1.98	0.04	2.11	99.79	81.76
908	35	4543	1.68	0.03	1.79	99.82	83.55
941	37	9496	3.92	0.06	4.17	99.89	87.73
974	19	4178	1.92	0.03	2.04	99.92	89.77
1007	12	609	0.31	0.00	0.33	99.92	90.10
1040	10	2949	1.65	0.02	1.76	99.94	91.86
1073	4	306	0.19	0.00	0.20	99.94	92.06
1106	6 2	992	0.67	0.01	0.71	99.95	92.77
1139 1172	5	1047 3460	0.77 2.79	0.01 0.02	0.82 2.97	99.96 99.98	93.59
1205	4	410	0.36	0.02	0.38	99.98	96.57 96.95
1238	i	1648	1.57	0.01	1.67	99.99	98.62
1271	î	293	0.30	0.00	0.32	99.99	98.94
1304	ī	519	0.58	0.00	0.62	100.00	99.56
1 3 3 7	0	0	0.00	0.00	0.00	100.00	99.56
1370	0	0	0.00	0.00	0.00	100.00	99.56
1403	0	0	0.00	0.00	0.00	100.00	99.56
1436	0	0	0.00	0.00	0.00	100.00	99.56
1469	0	0	0.00	0.00	0.00	100.00	99.56
1502	1	242	0.41	0.00	0.44	100.00	100.00
1535	U	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.48E 07	93.86				
TOTAL I	RAW PART	ICLES	39541/508	05 77.	83%		

NUMBER MEAN DIAMETER... 114.34 MICROMETERS S.D.... 121.76

VOLUME MEAN DIAMETER... 229.71 MICROMETERS S.D.... 408.69

SAUTER MEAN DIAMETER... 434.48 MICROMETERS

Reference #4

8020 FF,90 Degrees,40 psi,100 mph, 2.0 gpm, Water

DIG 83/04/28 15:58:02

DFM=2.0--3.0 MHz

UPPER						ACCU	MULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	<u>8 </u>	%_VOL.	<u>₹ N</u>	% VOL.
56	1610	2.61E 07	0.86	46.68	0.76	46.68	0.76
89	2276	8.23E 06	1.64	14.71	1.44	61.39	2.20
122	2351	5.31E 06	3.22	9.48	2.84	70.88	5.03
154	2365	5.57E 06	7.62	9.96	6.71	80.84	11.74
187	2140	3.95E 06	10.22	7.05	8.99	87.89	20.74
219	1566	1.97E 06	8.63	3.53	7.59	91.41	28.33
252	1235	1.32E 06	8.97	2.35	7.89	93.76	36.22
284	1140	1.11E 06	11.18	1.99	9.84	95.75	46.07
318	1132	1.00E 06	14.43	1.79	12.70	97.55	58.77
351	805	492858	9.64	0.88	8.49	98.43	67.26
382	572	307861	7.86	0.55	6.92	98.98	74.17
414	503	166899	5.50	0.30	4.84	99.28	79.01
447	354	181115	7.55	0.32	6.64	99.60	85.65
479	26 4	87170	4.52	0.16	3.98	99.76	89.63
512	205	48859	3.11	0.09	2.73	99.84	92.37
545	149	36632	2.82	0.07	2.48	99.91	94.85
578	82	22013	2.03	0.04	1.79	99.95	96.64
611	48	15314	1.68	0.03	1.48	99.98	98.12
644	36	5150	0.66	0.01	0.58	99.98	98.70
6 77	19	2825	0.42	0.01	0.37	99.99	99.07
710	9	5207	0.91	0.01	0.80	100.00	99.87
743	6	422	0.08	0.00	0.07	100.00	99.95
7 76	1	82	0.02	0.00	0.02	100.00	99.96
809	2	132	0.03	0.00	0.03	100.00	99.99
842	0	0	0.00	0.00	0.00	100.00	99.99
875	2	25	0.01	0.00	0.01	100.00	100.00
908	0	0	_0.00	0.00	0.00	100.00	100.00
TOTALS		5.60E 07	113.61				

TOTAL RAW PARTICLES.... 18872/25080-- 75.25%

NUMBER MEAN DIAMETER... 97.94 MICROMETERS S.D.... 81.06

VOLUME MEAN DIAMETER... 157.16 MICROMETERS S.D.... 233.37

SAUTEF MEAN DIAMETER... 240.16 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 146.03 MICROMETERS

D_{N0.5}... 63.71 MICROMETERS D_{V0.5}... 294.51 MICROMETERS R.S.... 1.15

D_{N0.9}... 206.72 MICROMETERS D_{V0.9}... 483.75 MICROMETERS

8020 FF,135 Degrees,40 psi,100 mph, 2.0 gpm, Water

DTG 83/05/06 14:08:31

DFM=2.0--3.0 MHz

UPPER						ACCUN	ULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>8 N</u>	%_VOL.	8 N	% VOL.
56	1108	3.23E 07	1.06	47.95	1.10	47.95	1.10
8 9	1381	9.95E 06	1.98	14.77	2.05	62.71	3.15
122	2233	6.63E 06	4.02	9.84	4.17	72.55	7.31
154	2172	5.92E 06	8.10	8.79	8.38	81.34	15.70
187	2298	4.77E 06	12.35	7.08	12.79	88.43	28.48
219	2215	3.17E 06	13.85	4.70	14.34	93.13	42.82
252	1808	1.93E 06	13.17	2.87	13.63	96.00	56.45
284	1688	1.13E 0 6	11.32	1.67	11.71	97.67	68.17
318	1659	847788	12.19	1.26	12.62	98.93	80.78
351	1069	412611	8.07	0.61	8.36	99.55	89.14
382	563	147191	3 .7 6	0.22	3.89	99.76	93.03
414	301	72345	2.38	0.11	2.47	99.87	95.49
447	153	42010	1.75	0.06	1.81	99.93	97.31
479	100	30720	1.59	0.05	1.65	99.98	98.95
512	46	7 4 8 6	0.48	0.01	0.49	99.99	99.45
545	16	3957	0.30	0.01	0.32	100.00	99.76
578	8	1188	0.11	0.00	0.11	100.00	99.88
611	5 1	934	0.10	0.00	0.11	100.00	99.98
6 4 4		96	0.01	0.00	0.01	100.00	99.99
677	1	3 3	0.00	0.00	0.01	100.0C	100.00
710	0	0	_0.00	0.00	0.00	100.00	100.00
TOTALS		6.74E 07	96.60				

TOTAL RAW PARTICLES.... 18825/25215-- 74.66%

NUMBER MEAN DIAMETER... 92.73 MICROMETERS S.D.... 70.96

VOLUME MEAN DIAMETER... 139.97 MICROMETERS S.D.... 191.61

SAUTER MEAN DIAMETER... 201.15 MICPOMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 132.19 MICROMETERS $D_{V0.5}...$ 236.83 MICROMETERS R.S... 0.95

 $D_{N0.9}...$ 197.98 MICROMETERS $D_{V0.9}...$ 358.26 MICROMETERS

8020 FF,0 Degrees,40 psi,150 mph, 2.0 gpm, Water DTG 83/04/28 10:20:59

ACCUMULATED

R.S.... 1.42

DFM=1.0--4.0 MHz

UPPER						VC20	MODATED	
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>₹ _N</u>	% VOL.	8 11	%_VOL.	
56	581	1.72E 07	0.57	39.15	0.52	39.15	0.52	
89	1694	7.11E 06	1.41	16.15	1.29	55.30	1.81	
122	2107	6.14E 06	3.73	13.95	3.40	69.25	5.21	
154	1851	4.67E 06	6.39	10.62	5.83	79.87	11.04	
187	1118	2.84E 06	7.36	6.46	6.71	86.33	17.75	
219	877	2.28E 06	9.96	5.18	9.08	91.51	26.83	
252	730	1.36E 06	9.25	3.08	8.43	94.59	35.27	
284	392	728945	7.32	1.66	6.68	96.25	41.94	
318	222	446609	6.42		5.86		47.80	
351	157	292883	5.73	0.67	5.23		53.03	
382	94	213112	5.44	0.48	4.95		57.99	
414	77	184738	6.08	0.42	5.55	98.83	63.54	
447	62	107519	4.48	0.24	4.09	99.08	67.62	
479	39	98562	5.11	0.22	4.66	99.30	72.28	
512	25	6 25 2 3	3.97	0.14	3.52	99.44	75.91	
545	24	59580	4.59	0.14	4.18	99.58	80.09	
578	18	74809	6.91	0.17	6.30	99.75	86.39	
611	2	1446		0.00	0.14	99.75	86.54	
644	9	96 3 9 8	12.43	0.22	11.33	99.97	97.87	
677	4	199	0.03		0.03	99.97	97.90	
710	6	9 26 1	1.61	0.02	1.47	99.99	99.37	
743	3	3302	0.66	0.01	0.60	100.00	99.97	
776	0	0	0.00	0.00	0.00	100.00	99.97	
809	1	66	0.02		0.02	100.00	99.99	
842	1	45	0.01		0.01	100.00	100.00	
875	0	0	0.00	0.00	0.00	100.00	100.00	
TOTALS		4.40E 07	109.64					
TOTAL R	RAW PARTI	CLES	10094/1369	98 73.6	59%			
			·					
NUMBER	MEAN DIA	METER 1	04.56 MIC	ROMETERS	S.D	84.77		

UPPER

D_{V0.1}... 148.74 MICROMETERS
D_{V0.5}... 332.18 MICROMETERS

Dv0.9... 620.58 MICROMETERS

VOLUME MEAN DIAMETER... 168.26 MICROMETERS S.D.... 265.56

SAUTER MEAN DIAMETER... 262.94 MICROMETERS

D_{NO.1}... 0.00 MICROMETERS

D_{NO.5}... 78.43 MICROMETERS

D_{NO.9}... 210.34 MICROMETERS

Reference #4

8020 FF,90 Degrees,40 psi,150 mph, 2.0 gpm, Water

D'IG 83/04/28 16:15:30

DFM=2.0--4.0 MHz

UPPER						ACCUI	JULATED
TIWIT.	N(RAW)	N/SEC	qm/SEC	<u>8 N</u>	%_VOL.	<u>8 </u>	% VOL.
56	624	2.47E 07	0.81	43.69	1.15	43.69	1.15
89	1158	9.69E 06	1.93	17.17	2.74	60.85	3.89
122	1769	6.03E 06	3.66	10.68	5.21	71.53	9.10
154	1998	6.07E 06	8.30	10.75	11.80	82.28	20.90
187	1948	4.48E 06	11.60	7.93	16.49	90.21	37.39
219	1816	2.69E 06	11.78	4.77	16.74	94.98	54.13
252	1618	1.75E 06	11.94	3.10	16.97	98.09	71.11
284	639	590599	5.93	1.05	8.43	99.13	79.54
318	27 7	130836	1.88	0.23	2.67	99.37	82.21
351	129	156221	3.06	0.28	4.34	99.64	86.56
382	69	22095	0.56	0.04	0.80	99.68	87.36
414	34	30985	1.02	0.05	1.45	99.74	88.81
447	18	60381	2.52	0.11	3.58	99.84	92.39
479	9	57247	2.97	0.10	4.22	99.94	96.61
512	7	1548	0.10	0.00	0.14	99.95	96.75
545	3	29738	2.29	0.05	3.25	100.00	100.00
578	0	0	_0.00	0.00	0.00	100.00	100.00
TOTALS		5.65E 07	70.35				

TOTAL RAW PARTICLES.... 12116/17510-- 69.19%

NUMBER MEAN DIAMETER... 92.35 MICROMETERS S.D.... 65.18

VOLUME MEAN DIAMETER... 133.55 MICROMETERS S.D.... 189.92

SAUTER MEAN DIAMETER... 186.41 MICROMETERS

DN0.1... 0.00 MICROMETERS DV0.1... 124.12 MICROMETERS DV0.5... 68.40 MICROMETERS DV0.5... 211.80 MICROMETERS P.S.... 1.42

 $D_{N0.9...}$ 186.39 MICROMETERS $D_{V0.9...}$ 425.30 MICPOMETERS

Reference #4

8020 FF,135 Degrees,40 psi,150 mph, 2.0 gpm, Water

DIG 83/05/06 14:29:14

DFM=2.0--4.0 MHz

UPPER						ACCU	MULATED
LIMIT	N(FAW)	N/SEC	qm/SEC	<u>₹ N</u>	%_VCL.	<u>8 N</u>	<pre>% VOL.</pre>
56	363	3.07E 07	1.01	48.11	1.73	48.11	1.73
89	835	9.80E 06	1.95	15.37	3.34	63.48	5.07
122	1 56 7	6.29E 06	3.82	9.87	6.55	73.35	11.63
154	1746	6.97E 06	9.53	10.92	16.34	84.27	27.97
187	1777	5.40E 06	13.99	8.47	24.00	92.74	51.97
219	1706	2.73E 06	11.94	4.28	20.49	97.03	72.46
252	1219	1.30E 06	8.82	2.03	15.13	99.06	87.59
284	360	434054	4.36	0.68	7.48	99.74	95.07
318	110	93958	1.35	0.15	2.32	99.89	97.39
351	41	56813	1.11	0.09	1.91	99.98	99.29
382	13	14386	0.37	0.02	0.63	100.00	99.92
414	7	1292	0.04	0.00	0.07	100.00	100.00
447	0	0	0.00	0.00	0.00	100.00	100.00
479	1	48	0.00	0.00	0.00	100.00	100.00
512	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		6.38E 07	58.30				

TOTAL RAW PARTICLES.... 9745/14627-- 66.62%

NUMBER MEAN DIAMETER... 86.25 MICROMETERS S.D.... 58.28

VOLUME MEAN DIAMETER... 120.46 MICROMETERS S.D.... 151.01

SAUTER MEAN DIAMETEF... 161.30 MICFOMETERS

 $D_{N0.1}$... 0.00 MICROMETERS $D_{V0.1}$... 113.74 MICROMETERS $D_{V0.5}$... 184.56 MICFOMETERS $D_{V0.5}$... 0.81

 $D_{N0.9...}$ 176.59 MICROMETERS $D_{V0.9...}$ 262.42 MICROMETERS

D'IC &3/04/13 09:34:11

DFM=2.0--3.0 MHz

UPPEF						ACCU	MULATED
LIMIT	MIRAWL	N/SEC	qm/SEC	$\frac{8}{N}$	%_VOL.	<u>₹_11</u>	%_VOL.
56	146	1.78E 06	0.06	33.98	0.79	33.98	0.79
29	660	995508	0.20	19.06	2.69	53.04	3.49
122	1450	708105	0.43	13.55	5.85	66.59	9.33
154	2467	693639	0.95	13.28	12.91	79.87	22.24
187	2355	458105	1.19	8.77	16.14	88.64	38.38
219	1677	304170	1.33	5.82	18.09	94.46	56.47
252	1155	154851	1.05	2.96	14.35	97.43	70.82
284	689	60645	0.61	1.16	8.29	98.59	79.10
318	3 3 7	3 56 79	0.51	0.68	6.98	99.27	30.08
351	191	19774	0.39	0.38	5.26	99.65	91.34
382	76	10911	0.28	0.21	3.79	99.86	95.13
414	38	1887	0.06	0.04	0.85	99.89	95.97
447	17	26 5 4	0.11	0.05	1.50	99.94	97.48 [.]
479	5	219	0.01	0.00	0.15	99.95	97.63
512	2	26 28	0.17	0.05	2.27	100.00	99.91
545	1	89	0.01	0.00	0.09	100.00	100.00
578	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		5.22E 06	7.35				

TOTAL RAW PARTICLES.... 11266/14728-- 76.49%

NUMBER MEAN DIAMETER... 101.43 MICROMETERS S.D.... 65.56

VOLUME MEAN DIAMETER... 139.09 MICROMETERS S.D.... 183.13

SAUTER MEAN DIAMETER... 184.46 MICROMETERS

DNO.1... 0.00 MICROMETERS DV0.1... 123.31 MICROMETERS DV0.5... 208.15 MICROMETERS PV0.5... 194.66 MICROMETERS DV0.9... 342.88 MICROMETERS

Reference #4

D2-23,90 Degrees,40 psi,50.mph, 0.1 gpm, Water

DTG 83/05/20 14:01:44

DFM=2.0--1.5 MHz

UPPER						ACCU	MULATED	
LIMIT	N (RAW)	N/SEC	qm/SEC	<u>₹ _ N</u>	&_VCL.	<u>8</u> − <u>N</u>	<pre>% _VOL.</pre>	
56	1064	4.15E 06	0.14	52.98	2.20	52.98	2.20	
89	1477	1.57E 06	0.31	20.05	5.02	73.03	7.22	
122	1705	523345	0.32	6.69	5.12	79.72	12.34	
154	2433	6 50 8 5 5	0.89	8.32	14.34	88.03	26.68	
187	2045	438020	1.13	5.60	18.27	93.63	44.95	
219	1762	264198	1.16	3.38	18.61	97.01	63.56	
252	1391	135976	0.93	1.74	14.92	98.74	78.48	
284	1084	58811	0.59	0.75	9.52	99.50	88.00	
318	537	21927	0.32	0.28	5.08	99.78	93.07	
351	240	7811	0.15	0.10	2.46	99.88	95.53	
382	6 7	7090	0.18	0.09	2.92	99.97	98.45	
414	21	2098	0.07	0.03	1.11	99.99	99.56	
447	8	449	0.02	0.01	0.30	100.00	99.86	
479	1	19	0.00	0.00	0.02	100.00	99.88	
512	3	117	0.01	0.00	0.12	100.00	100.00	
545	0	0	0.00	0.00	0.00	100.00	100.00	
TOTALS		7.83E 06	6.21					
TOTAL R	AW PARTI	CLES	13838/1523	33 90.	84%			

NUMBER MEAN DIAMETER... 78.22 MICROMETERS S.D.... 56.14

VOLUME MEAN DIAMETER... 114.90 MICROMETERS S.D.... 157.36

SAUTER MEAN DIAMETER... 163.63 MICROMETERS

DTG 83/04/13 09:50:58

DFM=2.0--3.0 MHz

UPPER						A CCU	MULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>8 N</u>	%_VOL.	<u>8 N</u>	% VOL.
56	203	3.39E 06	0.11	42.21	1.56	42.21	1.56
89	920	1.77E 06	0.35	22.05	4.92	64.26	6.48
122	1444	925153	0.56	11.51	7.85	75.7 7	14.32
154	1984	871123	1.19	10.84	16.64	86.61	30.96
187	2217	538008	1.39	6.70	19.46	93.31	50.42
219	1865	295661	1.29	3.68	18.05	96.99	68.47
252	1188	133473	0.91	1.65	12.70	98.65	81.17
284	727	70325	0.71	0.88	9.86	99.52	91.04
318	404	257 57	0.37	0.32	5.17	99.84	96.21
351	132	9538	0.19	0.12	2.61	99.96	98.82
382	48	2453	0.06	0.03	0.87	99.99	99.69
414	20	486	0.02	0.01	0.22	100.00	99.91
447	4	112	0.00	0.00	0.07	100.00	99.98
479	3	29	0.00	0.00	0.02	100.00	100.00
512	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		8.04E 06	7.16				

TOTAL RAW PARTICLES.... 11159/14968-- 74.55%

NUMBER MEAN DIAMETER... 86.43 MICROMETERS S.D... 56.30

VOLUME MEAN DIAMETER... 119.43 MICROMETERS S.D.... 154.23

SAUTER MEAN DIAMETER... 160.12 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 103.75 MICROMETERS

D_{N0.5}... 67.92 MICROMETERS D_{V0.5}... 186.56 MICROMETERS R.S.... 0.95

D_{N0.9}... 170.97 MICROMETERS D_{V0.9}... 281.31 MICROMETERS

C2-23,90 Degrees,40 psi,100 mph, 0.1 gpm, Water

DIG £3/05/05 10:35:57

DFM=2.0--3.0 MHz

UPPER						ACCUI	MULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	8 N	%_VOL.	<u>₹ _ N</u>	₹ _AOT·
56	567	2.55E 06	0.08	39.90	1.30	39.90	1.30
89	1354	1.50E 06	0.30	23.42	4.62	63.32	5.93
122	1246	697677	0.42	10.93	6.59	74.25	12.52
154	1682	536532	0.73	8.40	11.42	82.66	23.94
187	1654	534665	1.38	8.37	21.54	91.03	45.48
219	1461	356 398	1.56	5.58	24.24	96.61	69.72
252	906	133048	0.91	2.08	14.10	98.70	83.82
284	634	48477	0.49	0.76	7.58	99.46	91.40
318	330	27578	0.40	0.43	6.17	99.89	97.57
351	86	4884	0.10	90.0	1.49	99.97	99.05
382	26	1752	0.04	0.03	0.70	99.99	99.75
414	9	192	0.01	0.00	0.10	100.00	99.85
447	5	159	0.01	0.00	0.10	100.00	99.95
479	1	19	0.00	0.00	0.02	100.00	99.97
512	2	19	0.00	0.00	0.02	100.00	99.99
545	0	0	0.00	0.00	0.00	100.00	99.99
578	1	10	0.00	0.00	0.01	100.00	100.00
611	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		6.38E 06	6.43				

TOTAL RAW PARTICLES.... 9964/10818-- 92.11%

NUMBER MEAN DIAMETER... 90.13 MICROMETERS S.D... 59.14

VOLUME MEAN DIAMETER... 124.40 MICROMETERS S.D.... 156.57

SAUTER MEAN DIAMETER... 165.66 MICROMETERS

D_{N0.1}... 0.00 MICRCMETERS D_{V0.1}... 109.32 MICROMETERS

D_{N0.5}... 70.49 MICROMETERS D_{V0.5}... 193.10 MICROMETERS R.S.... 0.88

 $D_{N0.9}$... 183.21 MICROMETERS $D_{V0.9}$... 278.70 MICROMETERS

D2-23,0 Degrees,40 psi,150 mph, 0.1 gpm, Water DTG 83/04/13 14:50:09

DFM=2.0--4.0 MHz

UPPER						A CCU	MULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>8 N</u>	% VOL.	<u>8 №</u>	%_VOL.
56	139	1.51E 06	0.05	24.45	0.72	24.45	0.72
89	908	1.65€ 06	0.33	26.65	4.74	51.10	5.46
122	1327	796420	0.48	12.89	7.00	63.99	12.46
154	1685	701527	0.96	11.35	13.89	75.34	26.36
187	1580	1.21E 06	3.13	19.54	45.28	94.89	71.64
219	1009	189811	0.83	3.07	12.02	97.96	83.66
252	517	8 26 72	0.56	1.34	8.16	99.30	91.81
284	163	28801	0.29	0.47	4.19	99.77	96.00
318	40	1575	0.02	0.03	0.33	99.79	96.33
351	14	12791	0.25	0.21	3.62	100.00	99.95
382	4	72	0.00	0.00	0.03	100.00	99.98
414	3	27	0.00	0.00	0.01	100.00	99.99
447	0	0	0.00	0.00	0.00	100.00	99.99
479	1	10	0.00	0.00	0.01	100.00	100.00
512	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		6.18E 06	6.91				

TOTAL RAW PARTICLES.... 7390/10099-- 73.18%

NUMBER MEAN DIAMETER... 102.94 MICROMETERS S.D.... 55.17

VOLUME MEAN DIAMETER... 128.81 MICROMETERS S.D.... 147.98

SAUTER MEAN DIAMETER... 156.68 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 110.34 MICROMETERS D_{N0.5}... 87.90 MICROMETERS D_{V0.5}... 171.51 MICROMETERS R.S.... 0.79

 $D_{N0.9}$... 179.02 MICROMETERS $D_{V0.9}$... 245.12 MICROMETERS

DTG 83/05/05 10:55:00

DFM=2.0--4.0 MHz

UPPER						ACCUI	MULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>₹ N</u>	₹ VCL.	<u>8 N</u>	<pre>§ VOL.</pre>
56	324	3.73E 06	0.12	43.35	2.48	43.35	2.48
89	1470	1.98E 06	0.39	23.04	7.97	66.39	10.45
122	158 7	1.16E 06	0.70	13.43	14.20	79.82	24.65
154	1637	1.02E 06	1.40	11.88	28.29	91.71	52.93
187	1298	479921	1.24	5.5 7	25.12	97.28	78.06
219	516	211 76 9	0.93	2.46	18.71	99.74	96.77
252	174	21215	0.14	0.25	2.92	99.99	99.69
284	18	378	0.00	0.00	0.08	99.99	99.77
318	4	562	0.01	0.01	0.16	100.00	99.93
351	1	168	0.00	0.00	0.07	100.00	100.00
382	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		8.61E 06	4.95				

TOTAL RAW PARTICLES.... 7029/ 8154-- 86.20%

NUMBER MEAN DIAMETER... 79.53 MICROMETERS S.D.... 45.71

VOLUME MEAN DIAMETER... 103.18 MICROMETERS S.D.... 122.73

SAUTER MEAN DIAMETER... 130.57 MICROMETERS

 $D_{N0.1}$... 0.00 MICROMETERS $D_{V0.1}$... 87.39 MICROMETERS $D_{V0.5}$... 151.18 MICROMETERS R.S... 0.80

D_{N0.9}... 149.86 MICROMETERS D_{V0.9}... 208.00 MICROMETERS

D2-25,0 Degrees,40 psi,50 mph, $0.16~\mathrm{gpm}$, Water

DTG 83/04/13 15:33:14

DFM=2.0--2.0 MHz

UPPER						A CCU	MULATED	
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>8 N</u>	% VOL.	<u>8 N</u>	% VOL.	
56	254	2.47E 06	0.08	36.47	0.79	36.47	0.79	
89	814	1.29E 06	0.26	19.05	2.50	55.53	3.29	
122	1 56 3	745627	0.45	11.00	4.41	66.53	7.70	
154	2768	840473	1.15	12.40	11.19	78.93	18.89	
187	2713	576824	1.49	8.51	14.54	87.45	33.43	
219	2 26 8	391427	1.71	5.78	16.66	93.22	50.09	
252	1558	222889	1.52	3.29	14.78	96.51	64.88	
284	1007	113318	1.14	1.67	11.08	98.18	75.96	
318	609	56171	0.81	0.83	7.86	99.01	83.82	
351	3 46	35030	0.69	0.52	6.67	99.53	90.49	
382	175	18159	0.46	0.27	4.51	99.80	95.01	
414	86	9455	0.31	0.14	3.03	99.94	98.04	
447	40	3140	0.13	0.05	1.27	99.98	99.31	
479	11	868	0.04	0.01	0.44	100.00	99.75	
512	3	117	0.01	0.00	0.07	100.00	99.82	
545	0	0	0.00	0.00	0.00	100.00	99.82	
578	0	0	0.00	0.00	0.00	100.00	99.82	
611	1	166	0.02	0.00	0.18	100.00	100.00	
6 4 4	0	0	0.00	0.00	0.00	100.00	100.00	
TOTALS		6.78E 06	10.27					

TOTAL RAW PARTICLES.... 14216/18656-- 76.20%

NUMBER MEAN DIAMETER... 101.46 MICROMETERS S.D.... 69.02

VOLUME MEAN DIAMETER... 142.58 MICROMETERS S.D.... 186.03

SAUTER MEAN DIAMETER... 192.48 MICROMETERS

 $D_{N0.1...}$ 0.00 MICROMETERS $D_{V0.1...}$ 128.39 MICROMETERS

D_{N0.5}... 79.69 MICROMETERS D_{V0.5}... 219.76 MICROMETERS R.S.... 1.00

 $D_{N0.9}$... 201.54 MICROMETERS $D_{V0.9}$... 348.85 MICROMETERS

Reference #4

HDDED

D2-25,90 Degrees,40 psi,50 mph, 0.16 gpm, Water

DTG 83/05/20 14:22:14

DFM=2.0--1.5 MHz

UPPER						ACCU	MULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	<u>₹ _ N</u>	%_VOL.	<u>8</u>	& VOL.
56	1138	7.27E 06	0.24	55.87	1.90	55.87	1.90
89	1429	1.79E 06	0.35	13.73	2.82	69.60	4.73
122	1753	1.13E 06	0.69	8.68	5.45	78.28	10.18
154	2389	997742	1.36	7.67	10.86	85.95	21.04
187	2064	803935	2.08	6.18	16.57	92.13	37.61
219	1758	479188	2.09	3.6€	16.67	95.82	54.27
252	1496	278632	1.90	2.14	15.10	97.96	69.38
284	1328	131139	1.32	1.01	10.48	98.97	79.86
318	939	67622	0.97	0.52	7.73	99.49	87.59
351	6 46	4 2 9 3 4	0.84	0.33	6.68	99.82	94.28
382	391	13964	0.36	0.11	2.84	99.92	97.11
414	204	6628	0.22	0.05	1.74	99.98	98.85
447	82	2220	0.09	0.02	0.74	99.99	99.59
479	22	699	0.04	0.01	0.29	100.00	99.88
512	2	66	0.00	0.00	0.03	100.00	99.91
545	3	148	0.01	0.00	0.09	100.00	100.00
578	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.30F 07	12.57				

TOTAL RAW PARTICLES.... 15644/17270-- 90.58%

NUMBER MEAN DIAMETER... 80.99 MICROMETERS S.D.... 61.62

VOLUME MEAN DIAMETER... 122.71 MICROMETERS S.D.... 169.55

SAUTER MEAN DIAMETER... 178.42 MICROMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 120.85 MICROMETERS

D_{N0.5}... 0.00 MICROMETERS D_{V0.5}... 211.48 MICROMETERS P.S.... 0.99

D_{NO.9}... 175.89 MICROMETERS D_{VO.9}... 330.16 MICROMETERS

D2-25,0 Degrees,40 psi,100 mph, 0.16 gpm, Water

DTG 83/04/13 15:50:25

DFM=2.0--3.0 MHz

UPPER						A CC U	MULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>8 N</u>	% VOL.	<u>₹ </u>	% VOL.
5 6	149	2.12E 06	0.07	29.14	0.71	29.14	0.71
89	720	1.61E 06	0.32	22.10	3.24	51.24	3.95
122	1227	1.03E 06	0.62	14.07	6.31	65.32	10.26
154	1783	984219	1.35	13.50	13.63	78.82	23.89
187	1993	785598	2.03	10.77	20.60	89.59	44.50
219	1818	370228	1.62	5.08	16.39	94.67	60.89
252	1278	196 40 5	1.34	2.69	13.55	97.36	74.44
284	929	112232	1.13	1.54	11.42	98.90	85.85
318	525	46 3 9 0	0.67	0.64	6.75	99.54	92.61
351	254	25169	0.49	0.35	4.99	99.88	97.59
382	91	6793	0.17	0.09	1.76	99.98	99.35
414	27	1301	0.04	0.02	0.43	99.99	99.78
447	9	150	0.01	0.00	0.06	100.00	99.85
479	3	26 7	0.01	0.00	0.14	100.00	99.99
512	1	19	0.00	0.00	0.01	100.00	100.00
545	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		7.29E 06	9.87				

TOTAL RAW PARTICLES.... 10807/14201-- 76.10%

NUMBER MEAN DIAMETER... 103.63 MICROMETERS S.D.... 62.81

VOLUME MEAN DIAMETER... 137.32 MICROMETERS S.D.... 169.81

SAUTER MEAN DIAMETER... 176.34 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 120.57 MICROMETERS

D_{N0.5}... 87.41 MICROMETERS D_{V0.5}... 198.02 MICROMETERS R.S.... 0.93

 $D_{N0.9}$... 189.61 MICROMETERS $D_{V0.9}$... 304.55 MICROMETERS

D2-25,90 Degrees,40 psi,100 mph, 0.16 gpm, Water DTG 83/05/05 11:17:43

DFM=2.0--3.0 MHz

UPPEP						ACCU	ULATED
LIMIT	N (RAW)	NZSEC	qm/SEC	<u>8 N</u>	% VOL.	<u>8 </u>	%_VCL.
56	964	4.97E 06	0.16	51.75	1.78	51.75	1.78
89	1362	1.53E 06	0.30	15.99	3.33	67.74	5.12
122	1325	687436	0.42	7.16	4.56	74.90	9.68
154	1845	869206	1.19	9.06	12.99	83.96	22.68
187	1674	740587	1.92	7.72	20.96	91.68	43.64
219	1265	452066	1.98	4.71	21.60	96.39	65.24
252	1016	193167	1.32	2.01	14.38	98.40	79.62
284	748	97830	0.98	1.02	10.74	99.42	90.36
318	496	4 20 2 9	0.60	0.44	6.60	99.86	96.97
351	153	11655	0.23	0.12	2.49	99.98	99.46
382	41	1258	0.03	0.01	0.35	100.00	99.81
414	11	357	0.01	0.00	0.13	100.00	99.94
447	4	84	0.00	0.00	0.04	100.00	99.98
479	2	38	0.00	0.00	0.02	100.00	100.00
512	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		9.60E 06	9.15				

TOTAL RAW PARTICLES.... 10906/11910-- 91.57%

NUMBER MEAN DIAMETER... 84.15 MICROMETERS S.D.... 60.63

VOLUME MEAN DIAMETER... 122.16 MICROMETERS S.D.... 157.63

SAUTER MEAN DIAMETEP... 169.48 MICROMETERS

 $D_{N0.1}$... 0.00 MICROMETERS $D_{V0,1}$... 122.42 MICROMETERS

D_{V0.5}... 196.66 MICROMETERS D_{N0.5}... 0.00 MICROMETERS R.S.... 0.82

DV0.9... 283.67 MICPOMETERS D_{N0.9}... 180.10 MICROMETERS

D2-25,0 Degrees,40 psi,150 mph, 0.16 gpm, Water

DTG 83/04/13 16:12:16

DFM=2.0--4.0 MHz

UPPER						ACCU!	MULATED
TIWIT	N(RAW)	N/SEC	qm/SEC	<u>8 N</u>	3 VOL.	<u>8 </u>	%_VOL.
56	84	2.12E 06	0.07	27 .7 8	0.74	27.78	0.74
89	577	1.710 06	υ.34	22.35	3.59	50.13	4.32
122	994	1.14E 06	0.69	14.67	7.29	65.00	11.61
154	1354	1.10E 06	1.50	14.33	15.83	79.33	27.44
187	1508	781296	2.02	10.22	21.37	89.55	48.81
219	1203	472585	2.07	6.18	21.83	95.74	70.64
252	829	219535	1.50	2.87	15.80	98.51	86.44
284	308	70076	0.70	0.92	7.44	99.53	93.87
318	70	30139	0.43	0.39	4.58	99.92	98.45
351	17	996	0.02	0.01	0.21	99.94	98.66
382	10	4888	0.12	0.06	1.32	100.00	99.97
414	4	73	0.00	0.00	0.03	100.00	100.00
447	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		7.64E 06	9.47				

TOTAL RAW PARTICLES.... 6968/ 9400-- 74.13%

NUMBER MEAN DIAMETER... 103.27 MICROMETERS S.D.... 59.46

VOLUME MEAN DIAMETER... 133.30 MICROMETERS S.D.... 157.76

SAUTER MEAN DIAMETER... 166.78 MICROMETERS

D2-25,90 Degrees,40 psi,150 mph, 0.16 gpm, Water DTG 83/05/05 11:30:41

DFM=2.0--4.0 MHz

UPPER						ACCUI	MULATED
LIMIT .	N(RAW)	N/SEC	qm/SEC	<u>₹ _N</u>	%_VOL.	<u>₹ _N</u>	% VOL.
56	4 26	6.61E 06	0.22	53.16	3.50	53.16	3.50
89	1138	2.63E 06	0.52	21.18	8.42	74.34	11.92
122	798	1.09E 06	0.66	8.74	10.62	83.08	22.54
154	9 46	1.19E 06	1.62	9.54	26.10	92.62	48.64
187	917	639116	1.66	5.14	26.65	97.77	75.29
219	570	185024	0.81	1.49	13.02	99.26	88.32
252	259	69574	0.47	0.56	7.63 .	99.82	95.95
284	43	19243	0.19	0.15	3.11	99.97	99.06
318	11	3098	0.04	0.02	0.72	100.00	99.78
351	. 0	0	0.00	0.00	0.00	100.00	99.78
382	1	512	0.01	0.00	0.21	100.00	99.99
414	2	18	0.00	0.00	0.01	100.00	100.00
447	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.24E 07	6.21				

TOTAL RAW PARTICLES.... 5111/6181-- 82.69%

NUMBER MEAN DIAMETER... 72.43 MICROMETERS S.D.... 45.17

VOLUME MEAN DIAMETER... 98.50 MICROMETERS S.D.... 126.02

SAUTER MEAN DIAMETER... 131.18 MICROMETERS

D_V0.1... 81.74 MICROMETERS D_{NO.1}... 0.00 MICROMETERS D_{N0.5}... 0.00 MICROMETERS D_{V0.5}... 155.96 MICROMETERS R.S.... 0.93

D_{NO.9}... 145.53 MICFOMETERS D_{V0.9}... 226.72 MICPOMETERS

Spray Pressure Airspeed	D2-45 D degrees 40 psi 25 mph D.20 gpm 10# Mn/100 gal H20	Slice Rate AVG DFM BAR Distance to Prob Sample Interval Number of Sample	100 1 cm. 1.5 5e 41 cm. 600 sec.
FILE: C:\PMS\DATA\1 Number of Tests Com		Scan Spacing Scan Length	
UPPER LIMIT N(RAW)	_N/SEC Gm/SEC	%_N %_VQL.	ACCUMULATED %_N %_YOL.
89 7248 122 9442 154 11436 187 9906 220 7907 252 6249 284 4256 318 2801 351 1534 382 857 414 408 447 165 479 93 512 42 545 14 578 2 611 2 644 2	664949	12.02	2.30
	PARTICLES / TOTAL IN	MAGES = 65529/ 43:	175 =151.8%
NUMBER MEAN DIA.= VOLUME MEAN DIA.= SAUTER MEAN DIA.=			
NUMBER MEDIAN DIA.=		RELATIVE SPAN = (0.96
VOLUME MEDIAN DIA.=	D _{V.1} 141.46 µm D _{V.5} 250.83 µm D _{V.9} 381.54 µm		

Reference #7

Spray F Airspee Flow Ra Tank Mi	ite	40 ps 80 mp .23 g NOVO Fo (Undilu	si oh pm oray 48B oted)	Slice Rate 4 MHz AVG 100 DFM 1 cm. BAR 1.5 Distance to Probe 20 cm. Sample Interval 3 sec. Number of Samples 60 Number of Scans 10 Scan Spacing 4 cm. Scan Length 20 cm.			
UPPER LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	ACCUI % N	MULATED % VOL.
56 89 122 154 187 220 252 284 318 351 382 414 447 479 512 545 578 611 644 677	803 1150 1009 812 510 300 218 149 122 98 73 58 33 25 15 7 5	4.06E+06 1.06E+06 872446 691215 414146 266312 194317 149071 128337 100258 82141 70993 39630 26848 18921 9255 4158 6121 1399 1432	0.13 0.21 0.53 0.95 1.07 1.17 1.32 1.50 1.85 1.96 2.10 2.34 1.65 1.39 1.20 0.71 0.38 0.67 0.18 0.22	49.54 12.91 10.65 8.43 5.05 3.25 2.37 1.82 1.57 1.22 1.00 0.87 0.48 0.33 0.23 0.11 0.05 0.07 0.02	0.62 0.98 2.46 4.39 4.98 5.41 6.15 6.96 8.57 9.11 9.74 10.86 7.67 6.47 5.59 3.31 1.78 3.12 0.84 1.00	49.54 62.45 73.10 81.53 86.59 89.84 92.21 94.03 95.59 96.82 97.82 98.69 99.17 99.50 99.73 99.84 99.89 99.97 99.98	0.62 1.60 4.06 8.45 13.43 18.84 24.99 31.95 40.52 49.63 59.37 70.23 77.90 84.37 89.95 93.26 95.05 98.16 99.00 100.00
	ACCEPTED RA		22.00	IMAGES	= 5391/	6347.5	= 84.9%
	MEAN DIA.= MEAN DIA.= MEAN DIA.=						
NUMBER	MEDIAN DIA	$D_{N.1}$ $D_{N.5}$ $D_{N.9}$	<56 µm 57.45 µm 221.77 µm		RELATIV	E SPAN =	0.99
	MEDIAN DIA						

No report - data provided by Temple Bowen, Novo Labs.

D4-45,0 Degrees,40 psi,50 mph, 0.36 gpm, Water DTG 83/04/14 09:43:28

DFM=2.0--2.0 MHz

UPPER						A CC U N	MULATED
LIMIT	N(RAW)	N\SEC	qm/SEC	<u>₹ </u>	% VOL.	<u>8 N</u>	₹ AOT.
56	1058	4.56E 06	0.15	43.40	0.55	43.40	0.55
89	2183	1.53E 06	0.30	14.53	1.11	57.92	1.66
122	2594	759599	0.46	7.22	1.69	65.15	3.36
154	3349	907000	1.24	8.63	4.55	73.77	7.91
187	3363	891170	2.31	8.48	8.47	82.25	16.38
219	2927	570319	2.49	5.42	9.15	87.67	25.52
252	2599	440021	3.00	4.18	11.00	91.86	36.52
284	2188	303710	3.05	2.89	11.19	94.75	47.72
318	1595	194385	2.79	1.85	10.25	96.59	57.97
351	1239	127275	2.49	1.21	9.14	97.80	67.10
382	943	94213	2.41	0.90	8.83	98.70	75.93
414	617	63384	2.09	0.60	7.66	99.30	83.59
447	3 96	27235	1.14	0.26	4.16	9 9. 56	87.75
479	234	19425	1.01	0.18	3.70	99.75	9,1.45
512	128	8469	0.54	0.08	1.98	99.83	93.42
545	67	5945	0.46	0.06	1.68	99.88	95.10
57 8	42	4124	0.38	0.04	1.40	99.92	96.50
611	29	5461	0.60	0.05	2.20	99.98	98.69
644	7	2156	0.28	0.02	1.02	100.00	99.71
677	5	76	0.01	0.00	0.04	100.00	99.76
710	4	256	0.04	0.00	0.16	100.00	99.92
743	0	0	0.00	0.00	0.00	100.00	99.92
776	0	0	0.00	0.00	0.00	100.00	99.92
809	1	84	0.02	0.00	0.08	100.00	100.00
842	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.05E 07	27.26				

TOTAL RAW PARTICLES.... 25568/28093-- 91.01%

NUMBER MEAN DIAMETER... 108.94 MICROMETERS S.D.... 89.03

VOLUME MEAN DIAMETER... 170.50 MICROMETERS S.D.... 239.22

SAUTER MEAN DIAMETER... 250.38 MICROMETERS

D4-45,90 Degrees,40 osi,50 mph, 0.36 gpm, Water DTG 81/05/00 14:43:01

DFM=2.0--1.5 MHz

UPPEP						ACCUM	MULATED
LIMIT	N(RAW)	MYSEC	qm/SEC	<u>8 N</u>	% VCL.	<u>8 </u>	%_VCL.
56	1958	8.06E 06	0.27	51.92	1.02	51.92	1.02
89	1849	2.04E 06	0.40	13.11	1.56	65.04	2.58
122	2456	1.06E 06	0.64	6.84	2.49	71.87	5.07
154	2629	1.48E 06	2.03	9.56	7.83	81.43	12.29
187	2043	955170	2.47	6.15	9.54	87.58	22.43
219	1985	685858	3.00	4.42	11.56	92.00	33.99
252	1816	457193	3.11	2.94	12.01	94.94	46.00
284	1635	287976	2.89	1.85	11.15	96.79	57.15
318	1418	201862	2.90	1.30	11.19	98.09	68.34
351	1080	133721	2.62	0.86	10.09	98.96	78.43
382	911	72557	1.85	0.47	7.14	99.42	85.57
414	657	44609	1.47	0.29	5.66	99.71	91.23
447	411	27274	1.14	0.18	4.38	99.89	95.62
479	198	8740	0.45	0.06	1.75	99.94	97.36
512	107	5896	0.37	0.04	1.44	99.98	98.81
545	36	1500	0.12	0.01	0.45	99.99	99.25
578	17	406	0.04	0.00	0.14	99.99	99.40
611	5	320	0.04	0.00	0.14	99.99	99.53
644	3	85	0.01	0.00	0.04	100.00	99.58
677	3	683	0.10	0.00	0.40	100.00	99.97
710	0	0 .	0.00	0.00	0.00	100.00	99.97
743	0	0	0.00	0.00	0.00	100.00	99.97
776	0 1	0	0.00	0.00	0.00	100.00	99.97
809	1	27	0.01	0.00	0.03	100.00	100.00
842	0	0	_0.00	0.00	0.00	100.00	100.0C
TOTALS		1.55E 07	25.94				

TOTAL RAW PARTICLES.... 21218/24212-- 87.63%

NUMBER MEAN DIAMETER... 92.81 MICROMETERS S.D.... 76.56

VOLUME MEAN DIAMETER... 147.26 MICROMETERS S.D.... 208.39

SAUTER MEAN DIAMETER... 220.64 MICPOMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 142.40 MICROMETERS

D_{N0.5}... 0.00 MICROMETERS D_{V0.5}... 263.62 MICPOMETERS R.S.... 1.01

D_{N0.9}... 205.03 MICROMETERS D_{V0.9}... 407.76 MICROMETERS

Reference #4

D4-45,0 Degrees,40 psi,100 mph, 0.36 gpm, Water

DFM=2.0--3.0 MHz

DTG 83/04/14 10:54:34

UPPER						A CC U	MULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>8 N</u>	%_VOL.	<u>8_N</u>	%_VOL.
56	246	3.71E 06	0.12	34.05	0.51	34.05	0.51
89	794	1.64E 06	0.33	15.10	1.37	49.15	1.88
122	1364	1.20E 06	0.73	11.01	3.06	60.16	4.94
154	1680	1.47E 06	2.01	13.50	8.43	73.66	13.37
187	1701	1.15E 06	2.97	10.55	12.48	84.21	25.86
219	1574	638344	2.79	5.87	11.72	90.08	37.57
252	1368	402122	2.74	3.70	11.50	93.77	49.08
284	1332	260891	2.62	2.40	11.00	96.17	60.08
318	1119	190543	2.74	1.75	11.50	97.92	71.58
351	797	103481	2.02	0.95	8.50	98.87	80.08
382	471	56693	1.45	0.52	6.08	99.39	86.16
414	26 4	28954	0.95	0.27	4.00	99.66	90.16
447	183	14568	0.61	0.13	2.55	99.79	92.71
479	94	7352	0.38	0.07	1.60	99.86	94.31
512	64	6191	0.39	0.06	1.65	99.92	95.96
545	43	3182	0.24	0.03	1.03	99.95	96.99
578	16	1087	0.10	0.01	0.42	99.96	97.41
611	10	3209	0.35	0.03	1.48	99.99	98.89
644	7	404	0.05	0.00	0.22	99.99	99.10
677	1	4 3	0.01	0.00	0.03	99.99	99.13
710	1 2	11	0.00	0.00	0.01	99.99	99.14
743		87 7	0.18	0.01	0.74	100.00	99.88
776	0	0	0.00	0.00	0.00	100.00	99.88
809	1	48	0.01	0.00	0.05	100.00	99.93
842	0	0	0.00	0.00	0.00	100.00	99.93
875	1	51	0.02	0.00	0.07	100.00	100.00
908	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.09E 07	23.82				

TOTAL RAW PARTICLES.... 13133/14633-- 89.75%

NUMBER MEAN DIAMETER... 112.73 MICROMETERS S.D.... 78.98

VOLUME MEAN DIAMETER... 161.15 MICROMETERS S.D.... 221.55

SAUTER MEAN DIAMETER... 220.89 MICROMETERS

 $D_{N0.1}$... 0.00 MICROMETERS $D_{V0.1}$... 141.41 MICROMETERS

D_{N0.5}... 91.48 MICROMETERS D_{V0.5}... 254.56 MICROMETERS R.S.... 1.07

D_{N0.9}... 219.51 MICROMETERS D_{V0.9}... 413.67 MICROMETERS

Reference #4

DIG 83/05/05 13:27:26

ACCUMULATED

DFM=2.0--3.0 MHz

UPPER						ACCUR	OLATED			
LIMIT	N (RAW)	N/SEC	qm/SEC	<u>₹ _ N</u>	% VCL.	8 N	%_VOL.			
56	1493	8.40E 06	0.28	50.11	1.27	50.11	1.27			
89	2085	2.29E 06	0.45	13.€5	2.09	63.76	3.36			
122	2101	1.35E 06	0.82	8.05	3.77	71.82	7.13			
154	2960	1.58E 06	2.16	9.41	9.91	81.22	17.04			
187	2497	1.34E 06	3.48	8.01	15.98	89.24	33.02			
219	1854	76 8185	3.36	4.58	15.43	93.82	48.45			
252	1526	457148	3.11	2.73	14.31	96.54	62.76			
284	1532	322503	3.24	1.92	14.88	98.47	77.64			
318	1228	150681	2.17	0.90	9.95	99.36	87.59			
351	521	6 16 09	1.21	0.37	5.54	99.73	93.13			
382	263	27719	0.71	0.17	3.25	99.90	96.38			
414	93	8283	0.27	0.05	1.25	99.95	97.63			
447	49	2380	0.10	0.01	0.46	99.96	98.09			
479	21	3141	0.16	0.02	0.75	99.98	98.83			
512	10	733	0.05	0.00	0.21	99.98	99.05			
545	4	2512	0.19	0.01	0.89	100.00	99.94			
578	1	81	0.01	0.00	0.03	100.00	99.97			
611	3	48	0.01	0.00	0.02	100.00	100.00			
644	1	7	0.00	0.00	0.00	100.00	100.00			
677	0	0	0.00	0.00	0.00	100.00	100.00			
TOTALS		1.68E 07	21.77							
TOTAL R	TOTAL RAW PARTICLES 18242/20714 88.07%									

NUMBER MEAN DIAMETER... 90.75 MICROMETERS S.D.... 68.56

VOLUME MEAN DIAMETER... 135.39 MICROMETERS S.D.... 181.93

SAUTER MEAN DIAMETER... 191.86 MICROMETERS

$D_{N0.1}$	0.00 MICROMETERS	D _{V0.1} 131.17 MICROMETERS	
D _{N0.5}	0.00 MICROMETERS	D _{V0.5} 223.02 MICROMETERS R.S 0.9	0
D _N 0.9	192.45 MICROMETERS	DVO.9 332.65 MICROMETERS	

Reference #4

UPPER

D4-45,0 Degrees,40 psi,150 mph, 0.36 gpm, Water

DTG 83/04/14 11:26:38

DFM=2.0--4.0 MHz

UPPER						ACCU	MULATED
LIMIT	N(RAW)	N/SEC	gm/SEC	₹ 7	<pre>% VOL.</pre>	<u>₹_N</u>	%_VOL.
56	116	3.01E 06	0.10	26.42	0.45	26.42	0.45
89	46 2	1.47E 06	0.29	12.88	1.33	39.30	1.78
122	950	1.56E 06	0.95	13.73	4.33	53.04	6.11
154	1230	1.89E 06	2.58	16.57	11.77	69.61	17.89
187	1350	1.44E 06	3.74	12.67	17.04	82.27	34.92
219	1379	919150	4.02	8.07	18.33	90.34	53.25
252	1295	6 46 8 3 9	4.41	5.68	20.10	96.02	73.35
284	742	288724	2.90	2.54	13.23	98.56	86.58
318	355	92276	1.33	0.81	6.05	99.37	92.63
351	163	56385	1.10	0.50	5.03	99.86	97.66
382	68	8932	0.23	0.08	1.04	99.94	98.70
414	28	2061	0.07	0.02	0.31	99.96	99.01
447	8	26 3 5	0.11	0.02	0.50	99.98	99.51
479	3	429	0.02	0.00	0.10	99.99	99.61
512	2	1334	0.08	0.01	0.39	100.00	100.00
545	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.14E 07	21.92				

TOTAL RAW PARTICLES.... 8152/ 9246-- 88.17%

NUMBER MEAN DIAMETER... 119.86 MICROMETERS S.D.... 69.73

VOLUME MEAN DIAMETER... 154.40 MICROMETERS S.D.... 180.63

SAUTER MEAN DIAMETER... 191.45 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 132.50 MICROMETERS D_{V0.5}... 214.09 MICROMETERS R.S.... 0.80 D_{N0.5}... 114.64 MICROMETERS

D_{NO.9}... 218.54 MICROMETERS D_{V0.9}... 302.95 MICROMETERS

D4-45,90 Degrees,40 psi,150 mph, 0.36 gpm, Water

DFM=2.0--4.0 MHz

UPPER						ACCUI	MULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	<u>8 N</u>	%_VCL.	<u>₹ </u>	₹ VOL.
56	511	7.99E 06	0.26	43.23	2.01	43.23	2.01
8 9	1061	4.54E 06	0.90	24.55	6.90	67.78	8.91
122	86 8	2.13E 06	1.29	11.51	9.89	79.30	18.80
154	1396	1.71E 06	2.34	9.26	17.91	88.56	36.71
187	1437	1.31E 06	3.38	7.07	25.89	95.63	62.60
219	1079	438785	1.92	2.38	14.68	98.00	77.28
252	583	245443	1.67	1.33	12.80	99.33	90.08
284	127	112315	1.13	0.61	8.63	99.94	98.71
318	37	9977	0.14	0.05	1.10	99.99	99.81
351	9	723	0.01	0.00	0.11	100.00	99.92
382	7	26 1	0.01	0.00	0.05	100.00	99.97
414	4	119	0.00	0.00	0.03	100.00	100.00
447	1	9	0.00	0.00	0.00	100.00	100.00
479	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.85E 07	13.07				

TOTAL RAW PARTICLES.... 7120/ 8821-- 80.72%

NUMBER MEAN DIAMETER... 81.64 MICROMETERS S.D.... 50.95

VOLUME MEAN DIAMETEP... 110.58 MICROMETERS S.D.... 139.63

SAUTER MEAN DIAMETER... 146.00 MICROMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 92.57 MICROMETERS $D_{N0.5}...$ 65.36 MICROMETERS $D_{V0.5}...$ 171.22 MICROMETERS R.S.... 0.93

 $D_{N0.9...}$ 161.00 MICROMETERS $D_{V0.9...}$ 252.25 MICROMETERS

Droplet spectra for D4-45 nozzle atomizing $MnSO_4$, Rhodamine BX, and water. (10 lbs MnSO4 + 48 oz Rh BX dye per 100 gal water)

Spray Pr Airspeed Flow Rat Tank Mix	.e	.0048510.0	00 gal H20	AVG DFM BAR Dist Samp Numb Numb Scan	ance to le Inter er of Sa er of Sc Spacing Length	10 1 1. Probe 30 val 60 mples 1 ans 16 2.	cm. 5 cm. D sec.
UPPER LIMIT	N(EVM)	_N\ZEC	<u>Gm/SEC</u>	<u>% </u>	%_YQL.	<u>%_N</u> ∴	MULATED %_YQL.
56 89 122 154 187 220 252 284 318 351 382 414 447 479 512 545 578 611 644 677 710 743 776 809	12355 11277 9105	8.81E+D6 2.48E+D6 2.19E+D6 3.8DE+D6 817821 587418 402517 266388 175875 88473 49423 30215 14598 6545 3831 1438 1570 0	0.29 0.49 1.33 2.46 3.05 3.58 4.00 4.04 3.83 3.44 2.26 1.26 0.42 0.29 0.13 0.17 0.05 0.00 0.00	46.63 13.10 11.57 9.52 6.24 4.33 3.11 2.13 1.41 0.93 0.47 0.26 0.16 0.08 0.00 0.00 0.00 0.00 0.00	0.87 1.47 3.96 7.35 9.10 10.69 11.95 12.07 11.44 10.27 6.75 4.86 3.76 2.26 1.24 0.88 0.40 0.51 0.15 0.00 0.00 0.00	46.63 59.73 71.30 80.82 87.05 91.38 94.49 96.62 98.03 98.96 99.43 99.69 99.85 99.93 99.99 100.00 100.00 100.00 100.00	0.87 2.34 6.30 13.65 22.75 33.44 45.39 57.46 68.97 85.78 90.
TOTAL 6	38E+04	.89E+07	33.49				

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TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 63818/60054 = 106.3%

NUMBER MEAN DIA. = D10... 97.29 µm
VOLUME MEAN DIA. = D30... 150.20 µm
SAUTER MEAN DIA. = D30... 220.29 µm

NUMBER MEDIAN DIA. = DN.1.. (56 µm
C56 µm
C56 µm
C97.29 µm

RELATIVE SPAN = 1.03

VOLUME MEDIAN DIA. = DV.1... 138.22 µm
DV.5... 264.40 µm
DV.5... 264.40 µm
DV.9... 409.72 µm
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D4-46, O DEGREES, 40 PSI, 50 MPH, 0.56 GPM, WATER DTG 83/04/14 11:48:53

DFM=2.0--2.0 MHz

UPPER						A CCU N	MULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>§ N</u>	& VOL.	8_N	& VOL.
56	925	2.10E 06	0.07	35.08	0.19	35.08	0.19
89	1726	821320	0.16	13.71	0.44	48.79	0.63
122	1566	510776	0.31	8.53	0.84	57.31	1.47
154	1877	573890	0.78	9.58	2.12	66.90	3.59
187	1542	548691	1.42	9.16	3.85	76.06	7.44
219	1301	330239	1.44	5.51	3.91	81.57	11.34
252	985	245268	1.67	4.09	4.52	85.56	15.87
284	86 8	203493	2.04	3.40	5.53	89.06	21.40
318	736	134003	1.93	2.24	5.21	91.30	26.61
351	6 46	128280	2.51	2.14	6.79	93.44	33.40
382	582	96618	2.47	1.61	6.68	95.05	40.08
414	494	68392	2.27	1.15	6.14	96.20	46.22
447	369	47914	2.00	0.80	5.40	97.00	51.62
479	304	38393	1.99	0.64	5.39	97.64	57.01
512	228 147	41015 35859	2.61 2.84	0.68 0.62	7.05 7.68	98.33 98.94	64.06 71.74
545 5 7 8	117	14361	1.33	0.82	3.59	99.18	75.33
611	72	7196	0.79	0.12	2.13	99.30	77.46
644	60	10935	1.41	0.12	3.82	99.48	81.28
677	48	9206	1.38	0.15	3.75	99.64	85.02
710	37	6308	1.10	0.11	2.97	99.74	87.99
743	27	5505	1.10	0.09	2.98	99.84	90.98
776	11	421	0.10	0.01	0.26	99.84	91.24
809	6	46 37	1.20	90.0	3.26	99.92	94.50
842	5	836	0.25	0.01	0.66	99.93	95.16
875	5	303	0.10	0.01	0.27	99.94	95.43
908	2	1376	0.51	0.02	1.38	99.96	96.81
941	3	1122	0.46	0.02	1.25	99.98	98.06
974	1	41	0.02	0.00	0.05	99.98	98.11
1007	0	0	0.00	0.00	0.00	99.98	98.11
1040	3	86 2	0.48	0.01	1.31	100.00	99.42
1073	0	0	0.00	0.00	0.00	100.00	99.42
1106	0	0	0.00	0.00	0.00	100.00	99.42
1139 1172	0 2	0	0.00	0.00	0.00	100.00	99.42
1205	0	26 7 0	0.22	0.00	0.58 0.00	100.00 100.00	100.00 100.00
	U		0.00	0.00	0.00	100.00	100.00
TOTALS		5.99E 06	3 6.95				

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TOTAL RAW PARTICLES.... 14693/16285-- 90.22%
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NUMBER MEAN DIAMETER... 136.03 MICROMETERS S.D.... 120.81

VOLUME MEAN DIAMETER... 227.63 MICROMETERS S.D... 347.44

SAUTER MEAN DIAMETER... 356.37 MICROMETERS

$D_{N0.1}$	0.00	MICROMETERS	Dv0.1	208.59	MICROMETERS		
D _{N0.5}	93.63	MICROMETERS	D _{V0.5}	437.43	MICROMETERS	R.S	1.20
		MICROMETERS		731.70	MICROMETERS		

D4-46,90 Degrees,40 psi,50 mph, 0.56 gpm, Water

DIG £3/05/20 15:06:54

DFM=2.0--1.5 MHz

UPPER						ACCUN	MULATED
LIMII	N(RAW)	N/SEC	qm/SEC	<u>₹ N</u>	₹ VCL.	<u>₹ </u>	3_VCL.
56	26 7 3	8.78E 06	0.29	56.42	0.77	56.42	0.77
89	2839	1.97E 06	0.39	12.68	1.05	69.09	1.83
122	2846	1.06E 06	0.65	6.83	1.73	75.92	3.56
154	3014	994079	1.36	6.39	3.65	82.31	7.20
187	2206	76 866 4	1.99	4.94	5.34	87.25	12.54
219	1525	524493	2.29	3.37	6.15	90.61	18.69
252	11 79	433863	2.96	2.79	7.93	93.40	26.62
284	999	248470	2.50	1.60	6.69	95.00	33.31
318	989	218969	3.15	1.41	8.44	96.40	41.75
351	203	165705	3.24	1.06	8.69	97.47	50.44
382	747	127836	3.26	0.82	8.75	98.29	59.19
414	614	91990	3.03	0.59	8.12	98.88	67.32
447	469	595 7 0	2.48	0.38	6.66	9 9. 26	73.97
479	363	37449	1.94	0.24	5.21	99.50	79.18
51 2	313	20791	1.32	0.13	3.54	99.64	82.72
545	235	17753	1.37	0.11	3.66	99.75	86.39
5 78	185	12770	1.18	30.0	3.16	99.83	89.55
611	101	7477	0.82	0.05	2.20	99.88	91.75
644	83	6138	0.79	0.04	2.12	99.92	93.87
677	6 2	4770	0.72	0.03	1.92	99.95	95.79
710	29	3683	0.64	0.02	1.72	99.98	97.51
743	25	992	0.20	0.01	0.53	99.98	98.04
776	12	642	0.15	0.00	0.39	99.99	98.44
809	6	2228	0.58	0.01	1.55	100.00	99.99
842	1	12	0.00	0.00	0.01	100.00	100.00
875	0	0	_ <u>0.0c</u>	0.00	0.00	100.00	100.00
TOTALS		1.56E 07	37.29				

TOTAL RAW PAFTICLES.... 22215/25468-- 87.23%

NUMBER MEAN DIAMETER... 92.41 MICFOMETERS S.D.... 88.57

VOLUME MEAN DIAMETEP... 166.07 MICPOMETERS S.D... 262.82

SAUTER MEAN DIAMETER... 279.57 MICROMETERS

D_{N0.1}... 0.00 MICFCMETERS D_{V0.1}... 171.57 MICFOMETERS

D_{N0.5}... 0.00 MICPCMETERS D_{V0.5}... 349.61 MICPCMETERS R.S.... 1.18

D_{NO.9}... 213.93 MICFOMETERS D_{VO.9}... 584.26 MICFOMETERS

Reference #4

D4-46,0 Degrees,40 psi,100 mph, 0.56 gpm, Water

DTG 83/04/14 14:23:11

DFM=2.0--3.0 MHz

UPPER						A CC UI	MULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	8 11	%_VOL.	<u>8 N</u>	% VOL.
56	659	3.15E 06	0.10	38.59	0.34	38.59	0.34
89	1253	1.12E 06	0.22	13.73	0.74	52.32	1.08
122	1213	711423	0.43	8.73	1.43	61.05	2.51
154	1397	970315	1.19	10.68	3.94	71.73	6.45
187	1371	5 99 4 8 3	1.81	8.58	6.00	80.31	12.45
219	1158	500707	2.19	6.14	7.25	86.45	19.70
252	935	268398	1.83	3.29	6.06	89.75	25.76
284	876	249039	2.50	3.06	8.29	92.80	34.05
318	783	151630	2.18	1.86	7.22	94.66	41.27
351	502	147151	2.88	1.81	9.54	96.47	50.80
382	422	75274	1.92	0.92	6.37	97.39	57.17
414	322	74181	2.44	0.91	8.09	98.30	65.26
447	247	39216	1.63	0.48	5.41	98.78	70.67
479 512	152 107	26 56 7 206 99	1.38	0.33	4.56	99.11	75.23
545	56	14467	1.32	0.25 0.18	4.36 3.69	99.36 99.54	79.59 83.28
578	66	13255	1.11	0.16	4.05	99.70	87.33
611	44	11299	1.24	0.14	4.10	99.84	91.44
644	30	2732	0.35	0.03	1.17	99.88	92.60
677	16	4319	0.65	0.05	2.15	99.93	94.75
710	14	2311	0.40	0.03	1.33	99.96	96.09
743	3	256	0.05	0.00	0.17	99.96	96.26
776	5	61	0.01	0.00	0.05	99.96	96.30
809	4	719	0.19	0.01	0.62	99.97	96.92
842	4	314	0.09	0.00	0.30	99.97	97.23
375	1	710	0.23	0.01	0.78	99.98	98.00
908	0	0	0.00	0.00	0.00	99.98	98.00
941	2	1252	0.52	0.02	1.71	100.00	99.72
974	0	0	0.00	0.00	0.00	100.00	99.72
1007	0	0	0.00	0.00	0.00	100.00	99.72
1040	1	153	0.09	0.00	0.28	100.00	100.00
1073	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		8.15E 06	30.19				

TOTAL RAW PARTICLES.... 11753/13620-- 86.29%

NUMBER MEAN DIAMETER... 119.49 MICROMETERS S.D.... 99.97

VOLUME MEAN DIAMETER... 192.04 MICROMETERS S.D.... 291.14

SAUTER MEAN DIAMETER... 291.80 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 173.78 MICPOMETERS

D_{N0.5}... 83.69 MICROMETERS D_{V0.5}... 348.51 MICPOMETERS R.S.... 1.22

D_{N0.9}... 254.52 MICROMETERS D_{V0.9}... 598.94 MICROMETERS

D4-46,90 Degrees,40 psi,100 mph, 0.56 gpm, Water DTG 83/05/05 14:00:02

DFM=2.0--3.0 MHz

UPPER						ACCU!	MULATED
LIMIT	N (RAW)	N/SEC	<u>qm/SEC</u>	<u>₹ N</u>	& VCL.	<u>₹_N</u>	%_VOL.
56	1257	1.06E 07	0.35	49.80	1.19	49.80	1.19
8 9	1641	3.97E 06	0.79	18.55	2.69	68.35	3.89
122	1583	1.50E 06	0.91	7.01	3.11	75.36	6.99
154	1964	1.73E 06	2.37	8.09	8.08		
187	1601	1.37E 06	3.55	6.41	12.12	89.87	27.19
219	1252	775386	3.39	3.63	11.56	93.49	38.75
252	981	51 46 26	3.51	2.41	11.96	95.90	50.71
284	936	407632	4.09	1.91	13.97	97.81	64.68
318	802	221219	3.18	1.03	10.85	98.84	75.53
351	547	112101	2.19	0.52	7.48	99.37	83.01
382	358	60314	1.54	0.28	5.25	99.65	88.27
414	228	28412	0.94	0.13	3.19	99.78	91.46
447	131	23298	0.97	0.11	3.31	99.89	94.77
479	70	10766	0.56	0.05	1.90	99.94	96.67
512	40	6999	0.44	0.03	1.52		
545		2833		0.01		99.99	
578	15	1158	0.11	0.01	0.36	99.99	99.30
611	6	1776	0.19	0.01	0.66	100.00	99.96
644	2	4 2	0.01	0.00	0.02	100.00	99.98
677	6 2 1	33	0.00	0.00	0.02	100.00	100.00
710	0	0	_0.00	0.00	0.00	100.00	100.00
TOTALS		2.14E 07	29.31				
TOTAL R	AW PARTI	CLES	13438/1558	31 86.3	25%		
NUMBER	MEAN DIA	METER	88.27 MICI	ROMETERS	S.D	70.19	

VOLUME MEAN DIAMETER... 137.87 MICROMETERS S.D.... 198.58

SAUTER MEAN DIAMETER... 206.07 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 133.90 MICROMETERS D_{N0.5}... 56.63 MICROMETEPS D_{V0.5}... 250.48 MICROMETERS F.S.... 1.06 D_{V0.9}... 399.91 MICROMETERS D_{N0.9}... 188.14 MICROMETERS

D4-46,0 Degrees,40 psi,150 mph, 0.56 gpm, Water DTG 83/04/14 14:45:07

DFM=2.0--4.0 MHz

UPPER						A CCU N	ULATED
LIMIT	N (RAW)	NZSEC	qm/SEC	<u>8 N</u>	<pre>% VOL.</pre>	8 1	% VOL.
56	249	2.63E 06	0.09	34.52	0.52	34.52	0.52
89	750	1.54E 06	0.31	20.22	1.84	54.74	2.35
122	921	841441	0.51	11.04	3.06	65.78	5.42
154	1107	820064	1.12	10.76	6.72	76.54	12.14
187	1075	574190	1.49	7.53	8.91	84.07	21.04
219	1110	405531	1.77	5.32	10.62	89.39	31.67
252	1050	316498	2.16	4.15	12.92	93.55	44.58
284	604	216619	2.18	2.84	13.03	96.39	57.62
318	353	79643	1.14	1.04	6.86	97.43	64.48
351	222	76293	1.49	1.00	8.94	98.43	73.42
382	132	44461	1.14	0.58	5.80	99.02	80.22
414	93	17964	0.59	0.24	3.54	99.25	83.76
447	44	35830	1.49	0.47	8.95	99.72	92.71
479	24	15685	0.81	0.21	4.87	99.93	97.58
512	15	3037	0.19	0.04	1.16	99.97	98.74
545	6	1171	0.09	0.02	0.54	99.98	99.28
578	4	648	0.06	0.01	0.36	99.99	99.64
6 11	1	553	0.06	0.01	0.36	100.00	100.00
644	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		7.62E 06	16.69				

TOTAL RAW PARTICLES.... 7760/ 8975-- 86.46%

NUMBER MEAN DIAMETER... 108.73 MICROMETERS S.D.... 80.56

VOLUME MEAN DIAMETER... 161.18 MICROMETERS S.D.... 221.07

SAUTER MEAN DIAMETER... 228.64 MICROMETERS

D4-46,90 Degrees,40 psi,150 mph, 0.56 gpm, Water

ACCUMULATED

DIG 83/05/05 14:39:57

DFM=2.0--4.0 MHz

LIMIT.	N (RAW)	N/SEC	qm/SEC	<u>8 N</u>	%_VCL.	<u>₹ </u>	<pre>%_VOL.</pre>	
56	1140	9.00E 06	0.30	38.28	1.54	38.28	1.54	
89	2019	5.87E 06	1.17	24.96	6.05	63.24	7.59	
122	16 57	3.10E 06	1.88	13.20	9.78	76.44	17.37	
154	26 7 8	2.42E U6	3.31	10.31	17.20	86.75	34.58	
127	2571	1.77E 06		7.51	23.74	94.26	58.32	
219	2126	871996	3.81	3.71	19.79	97.97	78.11	
252	1374	313240	2.13		11.08			
284		112154	1.13		5.85	99.78		
318	120			0.14			_	
351	51	11713	0.23	0.05		99.97	98.71	
382	17	1321	0.03	0.01		99.98		
414	7	509	0.02	0.00		99.98		
447	4	4738	0.20	0.02			100.00	
479	0	0	_0.00	0.00	0.00	100.00	100.00	
TOTALS		2.35E 07	19.26					
TOTAL R	AW PARTI	CLES	14176/1858	33 76.2	28%			
NUMBER	MEAN DIA	METER	86.84 MICF	ROMETERS	S.D	53.04		
VOLUME	MEAN DIA	METER 1	16.15 MICE	ROMETERS	S.D	. 147.24		

SAUTER MEAN DIAMETER... 151.34 MICROMETERS

DN0.1	0.00	MICROMETERS	Dv0.1	97.06	MICFOMETERS		
D _{N0.5}	71.76	MICROMETERS	D _{V0.5}	175.72	MICPOMETERS	F.S	0.91
D _N 0.9	168.56	MICROMETERS	Dv0.9	256.35	MICROMETERS		

Reference #4

UPPER

D8-45,0 Degrees,40 psi,50 mph, 0.84 gpm, Water

DTG 83/04/14 16:05:51

DFM=2.0--2.0 MHz

UPPER						ACCUM	NULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	<u>₹ N</u>	% VOL.	<u>8 N</u>	%_VOL.
56	2466	7.98E 06	0.26	47.19	0.39	47.19	0.39
89	4409	1.99E 06	0.40	11.75	0.58	58.94	0.97
122	4867	1.24E 06	0.76	7.35	1.11	66.29	2.08
154	5429	1.39E 06	1.90	8.19	2.79	74.48	4.87
187	4504	1.10E 06	2.84	6.49	4.19	80.97	9.06
219	3414	752444	3.29	4.45	4.85	85.42	13.91
252	2791	606858	4.13	3.59	6.09	89.00	20.00
284	2173	437036	4.39	2.58	6.47	91.59	26.46
318	1850	332919	4.79	1.97	7.05	93.55	33.51
351	1631	277996	5.44	1.64	8.01	95.20	41.52
382	1363	207586	5.30	1.23	7.81	96.42	49.33
414	1224	184023	6.06	1.09	8.92	97.51	58.25
447	1036	143845	5.99	0.85	8.83	98.36	67.08
479	689	93846	4.87	0.55	7.17	98.92	74.25
512	500	63283	4.02	0.37	5.92	99.29	80.17
545	338	34974	2.69	0.21	3.97	99.50	84.14
578	243	27012	2.49	0.16	3.67	99.66	87.81
611	154	18737	2.05	0.11	3.02	99.77	90.83
644	120	19258	2.48	0.11	3.66	99.88	94.49
677	73	786 7	1.18	0.05	1.74	99.93	96.23
710	53	5372	0.94	0.03	1.38	99.96	97.61
743	23	3850	0.77	0.02	1.13	99.98	98.75
776	15	848	0.19	0.01	0.29	99.99	99.03
809	8	1252	0.33	0.01	0.43	99.99	99.51
842	8	710	0.21	0.00	0.31	100.00	99.82
875	1	94	0.03	0.00	0.05	100.00	99.86
908	1	12	0.00	0.00	0.01	100.00	99.87
941	0	0	0.00	0.00	0.00	100.00	99.87
974	1	149	0.07	0.00	0.10	100.00	99.97
1007	0	0	0.00	0.00	0.00	100.00	99.97
1040	0	0	0.00	0.00	0.00	100.00	99.97
1073	1	33	0.02	0.00	0.03	100.00	100.00
1106	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.69E 07	67.90				

TOTAL RAW PARTICLES.... 39385/44047-- 89.42%

NUMBER MEAN DIAMETER... 114.25 MICROMETERS S.D.... 106.83

VOLUME MEAN DIAMETER... 197.23 MICROMETERS S.D.... 291.09

SAUTER MEAN DIAMETER... 313.62 MICROMETERS

 $D_{N0.1}$... 0.00 MICROMETERS $D_{V0.1}$... 193.34 MICROMETERS $D_{V0.5}$... 384.47 MICROMETERS P.S.... 1.06

D_{N0.9}... 264.53 MICROMETERS D_{V0.9}... 601.39 MICROMETERS

D8-45,90 Degrees,40 psi,50 mph, 0.84 gpm, Water

DTG 83/05/20 15:41:02

DFM=2.0--1.5 MHz

UPPEF						ACCU	MULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>8 N</u>	% VCL.	₹ _N	₹ VOL.
56	1606	8.01E 06	0.26	45.72	0.53	45.72	0.53
89	2497	2.47E 06	0.49	14.13	0.98	59.85	1.51
122	2980	1.45E 06	0.88	8.26	1.75	68.11	3.26
154	2969	1.72E 06	2.36	9.83	4.70	77.94	7.96
187	2324	1.26 E 06	3.27	7.21	6.53	85.15	14.49
219	2064	700089	3.06	4.00	6.11	89.15	20.59
252	1650	504655	3.44	2.88	6.86	92.03	27.45
284	1411	414097	4.16	2.36	8.30	94.39	35.75
318	1266	266761	3.83	1.52	7.65	95.92	43.39
351	1060	186997	3.66	1.07	7.30	96. 98	50.69
382	956	16 25 39	4.15	0.93	8.28	97.91	58.97
414	839	114283	3.76	0.65	7.51	98.57	66.48
447	669	70468	2.94	0.40	5.86	98.97	72.33
479	5 7 9	6 89 56	3.58	0.39	7.13	99.36	79.47
512	363	40941	2.60	0.23	5.19	99.59	84.66
545	230	35597	2.74	0.20	5.47	99.80	90.12
5 7 8	129	12048	1.11	0.07	2.22	99.87	92.34
611	77	8255	0.90	0.05	1.80	99.91	94.15
644	5 2	3887	0.50	0.02	1.00	99.94	95.15
677	19	4053	0.61	0.02	1.22	99.96	96.36
710	10	667	0.12	0.00	0.23	99.96	96.59
743	6	1345	0.27	0.01	0.54	99.97	97.13
776	4	339	0.08	0.00	0.15	99.97	97.29
809	3	1450	0.38	0.01	0.75	99.98	98.04
842	2	3308	0.97	0.02	1.94	100.00	99.98
875	1	38	0.01	0.00	0.02	100.00	100.00
908	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.75E 07	50.13				

TOTAL RAW PARTICLES.... 23766/28040-- 84.76%

NUMBER MEAN DIAMETER... 105.37 MICPOMETERS S.D.... 92.60

VOLUME MEAN DIAMETER... 176.22 MICROMETERS S.D.... 269.24

SAUTER MEAN DIAMETER... 278.07 MICROMETERS

DNO.1... 0.00 MICROMETERS DV0.1... 164.60 MICROMETERS DV0.5... 348.15 MICROMETERS PN0.9... 229.19 MICPOMETERS DV0.9... 544.08 MICPOMETERS

Reference #4

D8-45,0 Degrees,40 psi,100 mph, $0.84~\mathrm{gpm}$, Water DTG 83/04/14~16:26:44

DFM=2.0--3.0 MHz

UPPER						ACCUN	MULATED			
LIMIT	N (RAW)	N/SEC	qm/SEC	<u>8 N</u>	% VOL.	<u>8 N</u>	%_VOL.			
56	921	8.50E 06	0.28	37.17	0.42	37.17	0.42			
89	2000		0.90	19.86	1.35		1.77			
122	2033	1.93E 06		8.42	1.75		3.51			
154		2.09E 06		9.14	4.27		7.78			
187	2255	1.86E 06		8.12	7.18		14.97			
219	1857	1.13E 06	4.93	4.93	7.37		22.33			
252			5.45		8.13		30.47			
284	1398	546148	5.49		8.19	93.53	38.66			
318	1437	497645	7.15	2.18	10.68	95.70	49.34			
351	1288			1.64	10.95	97.34	60.29			
382	1074	183207	4.68	0.80	6.98	98.14	67.27			
414	771	154530	5.09	0.53	7.60	98.82	74.87			
447	666	95705	3.99			99.24				
479	475	60593	3.14			99.50				
512	329	48199	3.06		4.57		90.09			
545	202	26 157	2.01	0.11	3.01	99.83	93.10			
578	136	17541	1.62	0.08	2.42		95.52			
611		9802	1.07	0.04	1.60		97.12			
644	45	4120	0.53	0.02		99.97	97.92			
677	23	3358	0.50	0.01		99.98	98.67			
710	13	3015	0.52	0.01		99.99	99.45			
743	5	80	0.02	0.00	0.02	99.99	99.48			
776	4	1531	0.35	0.01	0.52	100.00	100.00			
809	0	0	0.00	0.00	0.00	100.00	100.00			
TOTALS		2.29E 07	66.97							
ጥጋጥል፣. ፡፡	זייקגט שג	CLFS	20808/240	78 86 '	708					
TOTAL K	NOTAL RAW PARTICLES 20898/24078 86.79%									

NUMBER MEAN DIAMETER... 112.45 MICROMETERS S.D.... 91.92

VOLUME MEAN DIAMETER... 177.55 MICROMETERS S.D.... 255.32

SAUTER MEAN DIAMETER... 265.35 MICROMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 164.45 MICROMETERS $D_{V0.5}...$ 320.28 MICROMETERS R.S.... 1.03

D_{NO.9}... 241.66 MICROMETERS D_{VO.9}... 511.65 MICROMETERS

DTG 83/05/05 16:05:07

DFM=2.0--3.0 MHz

UPPER						ACCUN	ULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>₹ </u>	%_VCL.	<u>8 N</u>	%_VOL.
56	1304	1.02E 07	0.33	40.65	0.67	40.65	0.67
89	2171	3.63E 06	0.72	14.49	1.45	55.14	2.12
122	2877	2.58E 06	1.57	10.30	3.14	65.44	5.26
154	3234	2.97E 06	4.07	11.87	8.15	77.31	13.41
187	2400	2.18E 06	5.63	8.69	11.30	86.00	24.71
219	2123	1.20E 06	5.25	4.80	10.54	90.81	35.25
252	1917	820425	5.59	3.28	11.21	94.08	46.46
284	1850	607964	6.11	2.43	12.25	96.51	58.71
318	1645	412844	5.93	1.65	11.90	98.16	70.62
351	923	173949	3.40	0.69	6.83	98.86	77.44
382	454	121006	3.09	0.48	6.20	99.34	83.64
414	26 8	6 5 8 4 6	2.17	0.26	4.35	99.60	87.99
447	121	27476	1.15	0.11	2.30	99.71	90.29
479	89	34267	1.78	0.14	3.56	99.85	93.85
512	36	14077	0.89	0.06	1.79	99.91	95.64
545	25	15649	1.20	0.06	2.42	99.97	98.06
578	12	4795	0.44	0.02	0.89	99.99	98.95
611	10	1101	0.12	0.00	0.24	99.99	99.19
644	3	743	0.10	0.00	0.19	99.99	99.38
677	1	43	0.01	0.00	0.01	99.99	99.40
710		393	0.07	0.00	0.14	100.00	99.53
743	1	684	0.14	0.00	0.27	100.00	99.81
776	0	0	0.00	0.00	0.00	100.00	99.81
809	1	40	0.01	0.00	0.02	100.00	99.83
842	1	26 2	0.08	0.00	0.15	100.00	99.98
875	1 0	25	0.01	0.00	0.02	100.00	100.00
908	U	0	_0.00	0.00	0.00	100.00	100.00
TOTALS		2.50E 07	49.85				

TOTAL RAW PARTICLES.... 21468/24915-- 86.16%

NUMBER MEAN DIAMETER... 104.64 MICROMETERS S.D.... 78.57

VOLUME MEAN DIAMETER... 156.16 MICROMETERS S.D.... 219.74

SAUTER MEAN DIAMETER... 222.40 MICROMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 140.79 MICROMETERS $D_{N0.5}...$ 77.56 MICROMETERS $D_{V0.5}...$ 261.32 MICROMETERS $D_{V0.9}...$ 214.41 MICROMETERS $D_{V0.9}...$ 443.21 MICROMETERS

Reference #4

DTG 83/05/31 11:29:30

DFM=2.0--4.0 MHz

UPPER						A CCUA	MULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	8 N	% VOL.	N N	NOL.
56	304	1.17E 07	0.38	35.78	0.61	35.78	0.61
89	1034	5.51E 06	1.10	16.89	1.73	52.67	2.34
122	1534	3. 25E 06	1.98	9.97	3.12	62.64	5.46
154	2 217	4.16E 06	5.69	12.75	8.99	75.39	14.45
187	2320	2.93E 06	7.60	8.99	12.00	84.37	26.45
219	2165	2.02E 06	8.85	6.20	13.97	90.57	40.43
252	2380	1.45E 06	9.85	4.43	15.56	95.00	55.99
284	1771	808323	8.12	2.48	12.82	97.48	68.81
318	889	360519	5.18	1.10	8.19	98.58	77.00
351	484	237912	4.65	0.73	7.35	99.31	84.35
382	255	46650	1.19	0.14	1.88	99.45	86.24
414	126	106 946	3.52	0.33	5.56	99.78	91.80
447	90	22753	0.95	0.07	1.50	99.85	93.30
479	37	14327	0.74	0.04	1.17	99.89	94.47
512	14	7906	0.50	0.02	0.79	99.92	95.26
545	13	16 984	1.31	0.05	2.07	99.97	97.33
578	8	2555	0.24	0.01	0.37	99.98	97.70
611	3	159	0.02	0.00	0.03	99.98	97.73
6 4 4	1	15	0.00	0.00	0.00	99.98	97.73
677	1	6789	1.02	0.02	1.61	100.00	99.34
710	2	207	0.04	0.00	0.06	100.00	99.40
743	0	0	0.00	0.00	0.00	100.00	99.40
776	0	0	0.00	0.00	0.00	100.00	99.40
809 842	1	0 18	0.00 0.01	0.00 0.00	0.00 0.01	100.00	99.40 99.41
875	0	0	0.01	0.00	0.01	100.00	99.41
908	0	Ö	0.00	0.00	0.00	100.00	99.41
941	Ö	Ö	0.00	0.00	0.00	100.00	99.41
974	Ŏ	Ö	0.00	0.00	0.00	100.00	99.41
1007	Ö	Ö	0.00	0.00	0.00	100.00	99.41
1040	Ö	Ŏ	0.00	0.00	0.00	100.00	99.41
1073	Ö	Ŏ	0.00	0.00	0.00	100.00	99.41
1106	Ö	Ö	0.00	0.00	0.00	100.00	99.41
1139	0	Ó	0.00	0.00	0.00	100.00	99.41
1172	0	0	0.00	0.00	0.00	100.00	99.41
1205	0	0	0.00	0.00	0.00	100.00	99.41
1238	0	0	0.00	0.00	0.00	100.00	99.41
1271	0	0	0.00	0.00	0.00	100.00	99.41
1304	0	0	0.00	0.00	0.00	100.00	99.41
1337	0	0	0.00	0.00	0.00	100.00	99.41
1370	0	0	0.00	0.00	0.00	100.00	99.41
1403	0	0	0.00	0.00	0.00	100.00	99.41
1436	0	0	0.00	0.00	0.00	100.00	99.41
146 9	0	0	0.00	0.00	0.00	100.00	99.41
1502	0	0	0.00	0.00	0.00	100.00	99.41
1.535 1568	0	0	0.00	0.00	0.00	100.00	99.41
1601	1	192	0.37	0.00	0.59	100.00	100.00
	U	0	0.00	0.00	0.00	100.00	100.00
TOTALS		3.26E 07	63.31				

TOTAL RAW PARTICLES.... 15650/20207-- 77.45%

NUMBER MEAN DIAMETER... 108.14 MICROMETERS S.D.... 75.91

VOLUME MEAN DIAMETER... 154.77 MICROMETERS S.D.... 235.70

SAUTER MEAN DIAMETER... 212.39 MICROMETERS

D_{N 0.1}... 0.00 MICROMETERS D_{V 0.1}... 138.27 MICROMETERS

D_{N0.5}... 84.04 MICROMETERS D_{V0.5}... 239.75 MICROMETERS R.S.... 1.11

DNO.9... 216.91 MICROMETERS DVO.9... 404.31 MICROMETERS

Reference #4

D8-45,90 Degrees,40 psi,150 mph, 0.84 gpm, Water

DFM=2.0--4.0 MHz

					ACCU	MULATED
N(RAW)	N/SEC	qm/SEC	$\frac{g}{8} - \overline{N}$	%_VCL.	<u>₹ N</u>	% VCL.
215	1.42E 07	0.47	45.43	1.61	45.43	1.61
478	4.98E 06	0.99	15.95	3.43	61.36	5.04
617	3.68E 06	2.24	11.80	7.74	73.18	12.78
845	3.74E 06	5.11	11.97	17.69	85.15	30.47
724	2.29E 06	5.93	7.33	20.52	92.48	51.00
561	1.50L C6	6.55	4.80	22.66	97.28	73.65
3 7 0	608873	4.15	1.95	14.35	99.22	88.01
97	124464	1.25	0.40	4.33	99.62	92.33
31	6 5 5 0 5 ·	0.94	0.21	3.26	99.83	95.59
13	21248	0.42	0.07	1.44	99.90	97.03
4	28234	0.72	0.09	2.49	99.99	99.52
1	16 5	0.01	0.00	0.02	99.99	99.54
0	0	0.00	0.00	0.00	99.99	99.54
1	2556	0.13	0.01	0.46	100.00	100.00
0	0	_0.00	0.00	C. 00	100.00	100.00
	3.12E 07	28.90				
	215 478 617 845 724 561 370 97 31 13 4	215	215 1.42E 07 0.47 478 4.98E 06 0.99 617 3.68E 06 2.24 845 3.74E 06 5.11 724 2.29E 06 5.93 561 1.50L C6 6.55 370 608873 4.15 97 124464 1.25 31 65505 C.94 13 21248 0.42 4 28234 0.72 1 165 0.01 0 0 0.00 1 2556 0.13 0 0.00	215	215 1.42E 07 0.47 45.43 1.61 478 4.98E 06 0.99 15.95 3.43 617 3.68E 06 2.24 11.80 7.74 845 3.74E 06 5.11 11.97 17.69 724 2.29E 06 5.93 7.33 20.52 561 1.50L C6 6.55 4.80 22.66 370 60E873 4.15 1.95 14.35 97 124464 1.25 0.40 4.33 31 65505 0.94 0.21 3.26 13 21248 0.42 0.07 1.44 4 28234 0.72 0.09 2.49 1 165 0.01 0.00 0.02 0 0 0.00 0.00 0.00 1 2556 0.13 0.01 0.46 0 0 0.00 0.00 0.00	N(RAW) N/SEC qm/SEC % N % VCL. % N 215 1.42E 07 0.47 45.43 1.61 45.43 478 4.98E 06 0.99 15.95 3.43 61.36 617 3.68E 06 2.24 11.80 7.74 73.18 845 3.74E 06 5.11 11.97 17.69 85.15 724 2.29E 06 5.93 7.33 20.52 92.48 561 1.50L C6 6.55 4.80 22.66 97.28 370 60E873 4.15 1.95 14.35 99.22 97 124464 1.25 0.40 4.33 99.62 31 65505 C.94 0.21 3.26 99.83 13 21248 0.42 0.07 1.44 99.90 4 28234 0.72 0.09 2.49 99.99 1 165 0.01 0.00 0.02 99.99 0 0 0.00 0.00 0.00 99.99 1 2556 0.13 0.01 0.46 100.00 0 0.00 0.00 0.00 0.00

TOTAL RAW PARTICLES.... 3957/ 5216-- 75.86%

NUMBER MEAN DIAMETER... 87.62 MICFOMETERS S.D.... 57.70

VOLUME MEAN DIAMETER... 120.95 MICROMETERS S.D.... 153.95

SAUTER MEAN DIAMETER... 160.74 MICROMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 110.07 MICROMETERS $D_{V0.5}...$ 185.67 MICROMETERS R.S... 0.85

 $D_{N0.9...}$ 176.12 MICFOMETERS $D_{V0.9...}$ 267.00 MICFOMETERS

Nozzle D8-45 Angle to Airstream O degrees Spray Pressure 40 psi Airspeed 50 mph Flow Rate .88 gpm Tank Mix 33.3% GLYCERINE 66.6% WATER FILE: C:\PMS\DATA\OSO98614.001 Number of Tests Combined: 2				Slice Rate 2 MHz AVG 100 DFM 1 cm. BAR 1.5 Distance to Probe 31 cm. Sample Interval 300 sec. Number of Samples 1 Number of Scans 8 Scan Spacing 6 cm. Scan Length 40 cm.			
UPPER LIMIT	ŭ(RAW)	_N/SEC	<u>Gm/SEC</u>	<u>%_N</u>	%_VOL.	ACCUN %_N	ULATED
56 89 122 154 187 220 252 284 318 351 381 417 479 515 578 611 647 7710 7743 776 809 84 707	3376 5418 5203 4536 2826 1768 1215 845 724 574 437 380 288 202 132 109 81 47 44 20 17 10 3 1	1.35E+07 2.92E+06 2.48E+06 2.06E+06 1.25E+06 836715 618695 475469 417476 323632 237844 213973 156021 100298 69685 57107 47832 23446 21846 9121 7685 8861 1513 2389 273	0.44 0.58 1.50 2.82 3.66 4.22 4.78 6.03 7.50 6.03 7.50 4.42 2.52 1.34 1.77 0.69 	52.28 11.31 9.57 7.96 4.84 3.24 2.39 1.61 1.25 0.63 0.60 0.27 0.22 0.18 0.09 0.04 0.03 0.01 0.00	0.54 0.70 1.84 1.77 2.63 5.83 3.33 3.33 3.11 1.46 2.50 0.10 0.10 0.10 0.10 0.10 0.10 0.10 0	52.28 63.59 73.17 81.12 85.96 87.20 91.59 93.43 96.30 97.30 97.30 97.71 97.80 97.99 97.99 97.99 97.99 97.99 97.99	0.54 1.24 3.06 6.47 10.40 14.83 19.74 25.79 40.66 48.02 56.55 64.43 70.73 76.09 81.47 89.29 94.96 97.90 97.90 100.00
		W PARTICLES		IMAGES =	= 28 27 7/	34690 =	81.5%
		D10···· D30···· D32····					
		D _N .1 · · · · · · · · · · · · · · · · · · ·		RELA	ATIVE SPAN	ı = 1.10	
VOLUME	MEDIAN DIA	DV.1	183.97 µm 389.66 µm 611.63 µm				

```
Nozzle
                      D8-45
                                             Slice Rate
                                                                 2 MH<sub>2</sub>
Angle to Airstream O degrees
                                             AVG
                                                                 100
                     40 psi
                                             DFM
Spray Pressure
                                                                 1 cm.
Airspeed
                      60 mph
                                             BAR
                                                                 1.5
                      .88 gpm
Flow Rate
                                             Distance to Probe 31 cm.
                      33.3% GLYCERINE
                                            Sample Interval
                                                                 300 sec.
Tank Mix
                      66.6% WATER
                                             Number of Samples 1
                                            Number of Scans
                                                                 8
FILE: C:\PMS\DATA\05098614.002
                                            Scan Spacing
                                                                 6 cm.
Number of Tests Combined: 2
                                            Scan Length
                                                               40 cm.
                                                               ACCUMULATED
UPPER
LIMIT
          N(RAW)
                    N/SEC
                               Gm/SEC %_N
                                                  %_VOL.
                                                             % N % VOL.
  56
           2951
                   1.26E+07
                                 0.41
                                         51.94
                                                  0.50
                                                            51.94
                                                                       0.50
           4865
  89
                   2.74E+06
                                0.55
                                        11.31
                                                  0.66
                                                            63.25
                                                                      1.16
                                                            72.25
                                 1.33
                                         9.00
                                                  1.60
                                                                       2.76
 122
           4475
                   2.18E+D6
                                  2.51
                                          7.55
                                                   3.02
                                                                       5.78
           3799
                                                            79.80
 154
                   1.83E+06
           2503
                                         4.98
                                                  3.77
                                                                       9.56
 187
                   1.21E+06
                                  3.13
                                                            84.78
           1717
                                  3.74
                                           3.52
                                                  4.51
 220
                    854062
                                                            88.30
                                                                      14.07
                                                  5.12
                                          2.56
 252
           1179
                      622001
                                 4.24
                                                            90.86
                                                                     19.18
            925
                                          2.12
                                                  6.24
 284
                      514711
                                 5.17
                                                            92.98
                                                                      25.42
                                        1.56
                                                  6.55
 318
            697
                      377706
                                  5.43
                                                            94.54
                                                                     31.98
                                                  6.55
7.99
8.44
8.08
7.57
6.46
5.43
6.01
4.48
                                                            95.93
 351
           614
                      338413
                                 6.62
                                          1.40
                                                                     39.97
                                         1.13
            497
                                 6.99
                                                            97.06
 382
                      273723
                                                                     48.40
 414
            378
                      203236
                                 6.69
                                        0.84
                                                            97.90
                                                                     56.48
 447
                      150426
                                 6.27
                                        0.62
                                                            98.52
                                                                     64.04
            274
                                                                     70.51
 479
            209
                                 5.35
                                         0.43
                                                            98.95
                     103274
                     70771
64704
40221
                                                            99.24
 512
            155
                                 4.50
                                       0.29
                                                                     75.94
 545
                                 4.98
                                                            99.50
            128
                                       0.27
                                                                     81.95
                                                            99.67
 578
             75
                                 3.71
                                       0.17
                                                                     86.43
                     31154 3.41
20818 2.68
8406 1.26
8808 1.53
             67
                                        0.13
                                                  4.12
                                                            99.80
                                                                     90.55
 611
                                                  3.24
                                                          99.88
 644
             43
                                       0.09
                                                                     93.79
                                                  1.53
 677
                                        0.03
             23
                                                            99.92
                                                                     95.32
                                                                     97.17
 710
             22
                                         0.04
                                                  1.85
                                                            99.96
 743
             10
                       8374
                                         0.03
                                                  2.02
                                                            99.99
                                                                     99.19
                                 1.68
                       1649
                                                                     99.65
 776
                                                  0.46
             5
                                 0.38
                                        0.01
                                                           100.00
                                                  0.00
 809
              0
                         0
                                 0.00
                                        0.00
                                                           100.00
                                                                     99.65
                                       0.00
                                                  0.00
 842
                                                                     99.65
              0
                           0
                                  0.00
                                                           100.00
 875
                                                 0.35
              2
                         886
                                  0.29
                                                           100.00
                                                                     100.00
TOTAL 2.56E+04
                               82.85
                    2.43E+07
TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 25613/ 32000 = 80.0%
NUMBER MEAN DIA.= D10.... 103.41 \mum VOLUME MEAN DIA.= D30.... 186.91 \mum SAUTER MEAN DIA.= D32.... 312.49 \mum
NUMBER MEDIAN DIA.=D_{N.5}... <56 µm D_{N.5}... 241.43 µm
                                            RELATIVE SPAN = 1.07
VOLUME MEDIAN DIA.=D_{V.5}^{D.1...} 190.14 \mum D_{V.9}^{D.0} ... 388.53 \mum D_{V.9}^{D.0} ... 606.07 \mum
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30 PSI 1.5 gpm

DTG 50/09/01 05:39:00

DFM=2.0--1.5 MHz

UPPER						ACCU	AULATED
LIMIT	3 (RAW)	N/SEC	ga/sec	3 7	& VCL.	<u>3 7</u>	& VOL.
56	3053	1.09E 07	0.36	52.52	0.25	52.52	0.23
89	5 75 0	2.3JE 05	0.46	11.12	0.33	53.64	0.59
122	5031	1.13E 06	0.69	5.45	0.50	69.09	1.09
154	4743	1.215 06	1.55	5.34	1.20	74.93	2.30
187	3674	1.05E 06	2.72	5.06	1.93	79.99	4.27
219	2269	714317	3.13	3.45	2.27	33.44	6.55
252	1546	565122	3.86	2.73	2.31	36.17	9.35
234	1350	530996	5.33	2.56	3.33	33.73	13.23
318	1059	413059	5.94	1.99	4.32	90.73	17.55
351	947	376547	7.37	1.52	5.36	92.54	22.91
3੪2	7 20	232170	7.20	1.36	5.24	93.90	23.16
414	702	263407	8.84	1.30	6.43	95.20	34.59
447	62 7	211450	8.31	1.02	5.41	95.22	41.00
479	522	179418	9.30	0.3 7	5.77	97.09	47.77
512	420	128435	8.17	0.52	5.94	97.71	53.71
545	339 .	109834	8.46	0.53	6.15	93.24	59.86
578	295	83312	7.74	0.40	5.63	98.64	65.49
611	265	81394	8.93	0.40	6.53	99.04	72.03
644	205	58083	7.49	0.28	5.45	99.32	77.47
677	130	33844	5.09	0.16	3.70	99.48	81.13
710	90	28587	4.98	0.14	3.62	99.62	84.80
743	89	23894	4.78	0.12	3.48	99.73	88.28
776	54	13510	3.09	0.07	2.25	99.30	90.52
309	38	16505	4.29	0.08	3.12	99.88	93.64
842	25	11853	3.48	0.06	2.53	99.94	96.18
875	14	2369	0.78	0.01	0.57	99.95	96.75
908 941	12	6714	2.48	0.03	1.31	99.93	98.55
974	3 2	858 297 3	0.35 1.37	0.00	0.26	99.93	98.81
1007	0	2973	0.00	0.01 0.00	0.99 0.09	100.00 100.00	99.30 99.80
1040	1	57	0.00	0.00	0.00	100.00	99.33
1073	1	251	0.15	0.00	0.11	100.00	99.33
1106	1	121	0.13	0.00	0.11	100.00	100.00
1139	0	0	0.00	0.00	0.00	100.00	100.00
	0			0.00	0.00	100.00	150.00
TOTALS		2.075 0 7	137.43				

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TOTAL RAW PARTICLES.... 34247/44320-- 77.27%
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NUMBER MEAN DIAMETER... 119.55 MICROMETERS S.D.... 130.70

VOLUME MEAN DIAMETER... 233.20 MICROMETERS S.D.... 358.93

SAUTER MEAN DIAMETER... 404.22 MICROMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 257.30 MICROMETERS $D_{N0.5}...$ 491.72 MICROMETERS $D_{V0.5}...$ 491.72 MICROMETERS $D_{V0.9}...$ 767.80 MICROMETERS

D8-46,45 Degrees,50 mph, Esteron 99

DTG 84/09/05 14:29:00

30 psi 1.5 gpm

DFM=1.0--1.5 MHz

UPPER						ACCU	AULATED
LIMIT	N(RAW)	M/SEC	qm/SEC	<u>8 . </u>	% VOL.	<u>₹ N</u>	3 VOL.
56	1426	1.29E 07	0.42	52.75	0.49	52.75	0.49
8 9	2787	3.39E 06	0.67	13.87	0.77	66.62	1.26
122	2594	2.50E 06	1.52	10.23	1.74	76.85	3.00
154	1804	1.82E 06	2.49	7.44	2.85	84.30	5.85
187	883	931323	2.41	3.81	2.76	38.11	8.51
219	550	676480	2.96	2.77	3.39	90.37	11.99
252	390	539566	3.68	2.21	4.21	93.08	16.20
284	2 77	400869	4.03	1.64	4.61	94.72	20.81
318	221	319615	4.59	1.31	5.26	96.03	26.07
351	145	191776	3.75	0.78	4.30	96.81	30.37
382	109	147838	3.77	0.60	4.32	97.42	34.69
414	94	106538	3.51	0.44	4.02	97.85	38.71
447	72	88632	3.69	0.36	4.23	98.22	42.94
47 9	6 7	69446	3.60	0.28	4.12	98.50	47.05
512	41	38437	2.44	0.16	2.80	98.66	49.86
545	68	68508	5.27	0.28	6.04	98.94	55.90
578	54	60469	5.58	0.25	6.39	99.18	62.29
611	6 8	50042	5.49	0.20	6.28	99.39	68.57
644	53	42696	5.50	0.17	6.30	99.56	74.87
677	42	39751	5.98	0.16	6.84	99.73	81.72
710	39	22073	3.84	0.09	4.40	99.82	86.12
743	25	13551	2.71	0.06	3.11	99.87	89.22
776	20	6935	1.59	0.03	1.82	99.90	91.04
603	9	4948	1.29	0.02	1.47	99.92	92.51
842	11	11937	3.51	0.05	4.01	99.97	96.52
8 7 5	5	2963	0.98	0.01	1.12	99.93	97.64
90៩	1	317	0.12	0.00	0.13	99.93	97.73
941	2	1361	0.56	0.01	0.54	99.99	98.42
974	1	751	0.34	0.00	0.39	99.99	98.82
1007	1	2039	1.03	0.01	1.13	100.00	100.00
1040	Ĵ	0	0.00	0.00	0.00	100.00	100.00
POTALS		2.440 07	87.34				

TOTAL RAW PARTICLES.... 11359/17203-- 53.923

NUMBER MEAN DIAMETER... 96.24 MICROMETERS S.D.... 100.02

VOLUME MEAN DIAMETER... 189.75 MICROMETERS S.D.... 325.65

SAUTER MEAN DIAMETER... 354.61 MICROMETERS

 $D_{N0.1}$... 0.00 MICROMETERS $D_{V0.1}$... 200.51 MICROMETERS $D_{V0.5}$... 512.61 MICROMETERS R.S.... 1.08

DNO.9... 209.54 MICROMETERS DVO.9... 756.66 MICROMETERS

D8-46,90 Degrees,50 mph,Esteron 99

DTG 84/08/30 14:57:00

30 psi 1.5 gpm

DFM=1.0--1.5 MHz

UPPER						ACCU	MULATED
LIMIT	N (RAW)	N/SEC	gm/SDC	8 11	% VOL.	<u>₹_7</u>	% VOL.
56	3452	1.23E 07	0.40	51.22	0.50	51.22	0.50
89	4457	2.99E 06	0.59	12.49	0.74	63.71	1.24
122	3774	2.45E 06	1.49	10.25	1.85	73.96	3.09
154	3024	1.95E 06	2.66	8.13	3.31	82.10	6.40
187	1682	1.20E 06	3.11	5.02	3.86	87.11	10.27
219	999	818053	3.58	3.42	4.45	90.53	14.71
252	713	558627	3.81	2.33	4.73	92.87	19.45
284	559	383948	3.86	1.60	4.80	94.47	24.24
318	503	292204	4.20	1.22	5.22	95.69	29.47
351	502	269970	5.28	1.13	6.57	96.82	36.04
382	415	176489	4.51	0.74	5.60	97.56	41.64
414	312	114601	3.77	0.48	4.69	98.04	46.33
447	287	104853	4.37	0.44	5.43	98.48	51.77
479	214	80105	4.15	0.33	5.17	98.81	56.93
512	156	60509	3.85	0.25	4.78	99.06	61.71
545	127	53812	4.14	0.22	5.15	99.29	66.87
578	95	30741	2.84	0.13	3.53	99.42	70.40
611	77	32110	3.52	0.13	4.38	99.55	74.77
644	60	25337	3.27	0.11	4.06	99.66	78.84
677	55	29444	4.43	0.12	5.51	99.78	84.34
710	36	9978	1.74	0.04	2.16	99.82	86.50
743	24	10751	2.15	0.04	2.68	99.87	89.18
776	21	12885	2.95	0.05	3.66	99.92	92.84
809	11	6461	1.68	0.03	2.09	99.95	94.93
842	7	3448	1.01	0.01	1.26	99.96	96.19
875	6	5631	1.86	0.02	2.31	99.99	98.50
908	2	3256	1.20	0.01	1.50	100.00	100.00
941	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		2.39E 07	80.41				

TOTAL RAW PARTICLES.... 21570/29093-- 74.14%

NUMBER MEAN DIAMETER... 99.29 MICROMETERS S.D.... 98.05

VOLUME MEAN DIAMETER... 185.92 MICROMETERS S.D.... 312.73

SAUTER MEAN DIAMETER... 330.03 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 184.99 MICROMETERS

D_{N0.5}... 0.00 MICROMETERS D_{V0.5}... 436.59 MICROMETERS R.S.... 1.29

D_{N0.9}... 214.81 MICROMETERS D_{V0.9}... 749.91 MICROMETERS

Reference #12

D8-46,0 Degrees,50 mph,Garlon

		70.0	00 01 100 111	15.02.00	20			
		נע	G 84/09/14	13:02:00	30 psi 1.5 gp			
			DFM=2.01	.5 MHz	1.9 gl	лш		
UPPER						ACCU	MULATED	
LIMIT	N(RAW)	N/SEC	qm/SEC	8 71	%_VOL.	8 7	%_VOL.	
56	2558		0.26		0.20	43.13		
8 9	4773	1.995 06	0.39	10.81	0.31	53.93	0.51	
122 154	3864 3950	1.06E 05 1.57E 06	0.64 2.15	5.75 8.56	0.50 1.68	59.63		
187	3191	1.45E 06	3.74	7.87		68.24 76.11		
219	2114	995389					9.00	
252	1529	703409	4.83	3.86	3.76	85.38	12.76	
284	1194	528175	5.31	2.88	4.13	88.26		
318 351	1050 919	438629 364515	6.31 7.13	2.39 1.98	4.91 5.56	90.65	21.81 27.37	
382	742	276228	7.05	1.50	5.50	94.13	32.86	
414	603	204182	6.72	1.11	5.24	95.25		
447	571	180829	7.54	0.98	5.87	96.23	43.98	
479	459	137699 127484	7.14	0.75	5.56 6.32	96.98	49.54	
512 545	421 333	92766	8.10 7.14	0.69 0.50	5.57	97.57 98.18		
578	263	79483	7.34	0.43	5.72	98.61		
611	265	79483 70412 56597	7.72	0.38	6.02	98.99		
644	205			0.31	5.69	99.30	78.85	
677	138	39141	5.89 4.47	0.21	4.59	99.51	83.43	
710 743	83 80	2566 / 22780	4.47	0.14 0.12	4.59 3.48 3.55	99.65	86.92 90.47	
776	54			0.09	2.81	99.86		
809	27	8928	3.61 2.32	0.05	1.81	99.91	95.09	
842	15	4578	1.34	0.02	1.05	99.94	96.14	
875	16	4823	1.59	0.03	1.24	39.96		
908 941	6 5	2857 1217	1.06 0.50	0.02 0.01	0.82 0.39	99.98		
974	2	566	0.26	0.00	0.20	99.99	93.30	
1007	1	462	0.23	0.00	0.13	99.99	98.93	
1040	0	0	0.00	0.00	0.00	99.99	98.98	
1073	1	58	0.04	0.00	0.03	99.99	99.01	
1106 1139	3 0	8 48 0	0.57 0.00	0.00	0.45 0.00	100.00	99.46 9 9. 46	
1172	0	0	0.00	0.00	0.00	100.00	99.46	
1205	Ō	0	0.00	0.00	0.00	100.00	99.46	
1238	0	0	0.00	0.00	0.00	100.00	99.46	
1271	0	0 0	0.00	0.00	0.00	100.00	99.46	
1304	0 0	0	0.00	0.00	0.00 0.00	100.00	99.46	
1370	ì	540	0.70	0.00	0.54	100.00	100.00	
1403	0	0	0.00	0.00	0.00	100.00	100.00	
TOTALS		1.34E 07	128.30					
TOTAL R	AW PARTIC	CLES 2	29436/3710	6 79.3	3%			
NJENUR	MEAN DIA	HETER 1	33.28 MICE	OMETERS	3.D	129.73		
VOLUME	MEAN DIA	gerer 2	37.25 MICE	OMETERS	S.D	361.11		
		1DTER 38						
0.10.1	. 0.00	.HI CROMETE		1 228	.25 '11CRD	METERS		
0,10 5	. 77.26	MICROMETER	RS Dyn	5 481	72 MICRO	METERS	R.S 1.0	5
		MICROMETER			.14 MICRO			
110.7.			¥ 0 .	-				

30 psi 1.5 gpm

DTG 80/09/00 15:38:00

DFM=2.0--1.5 MHz

UPPER						ACCU:	MULATED
LIMIT	N(RAW)	N/SEC	gm/SEC	8 11	%_VOL.	<u>8 N</u>	% VOL.
56	1409	6.68E 05	0.22	43.79	0.33	43.79	0.33
89	3355	2.18E 06	0.43	14.28	0.65	58.07	0.98
122	3268	1.25E 06	0.76	8.19	1.14	66.26	2.11
154	2734	1.410 06	1.92	9.21	2.89	75.47	4.99
187	1861	1.030 06	2.66	6.73	3.98	82.20	8.97
219	1268	673037	2.96	4.44	4.44	86.54	13.41
252	902	469053	3.20	3.07	4.73	89.71	18.19
284	695	353590	3.55	2.32	5.31	92.03	23.50
318	564	253386	3.79	1.73	5.57	93.76	29.17
351	53U	241139	4.72	1.58	7.06	95.34	36.23
382	415	184509	4.71	1.21	7.05	96.54	43.28
414	313	137075	4.51	0.90	6.75	97.44	50.03
447	240	91090	3.80	0.60	5.53	38.04	55.71
479	203	73724	3.82	0.48	5.72	38.52	61.43
512	142	51085	3.25	0.33	4.36	98.86	66.29
545	135	50355	3.38	0.33	5.30	99.19	72.09
578	3 4	27350	2.57	0.18	3.85 ⋅	99.37	75.94
611	84	25012	2.74	0.16	4.10	99.53	80.05
644	56	16271	2.10	0.11	3.14	99.64	83.18
677	51	19094	2.87	0.13	4.30	99.77	87.43
710	26	11725	2.04	0.08	3.05	99.34	90.53
743	26	10380	2.08	0.07	3.11	99.91	93.64
776	14	4407	1.01	0.03	1.51	99.94	95.15
309	4	1533	0.40	0.01	0.50	99.95	95.75
342	3	1440	0.42	0.01	0.53	99.96	96.33
375	5	2976	0.98	0.02	1.47	99.93	97.35
903	3	1209	0.45	0.01	0.67	99.99	98.52
941	1	600	0.25	0.00	0.37	99.99	98.39
974	1	374	0.17	0.00	0.26	99.99	99.15
1007	1 1	343	0.43	0.01	0.54	100.00	99.70
1040	0	256	0.14	0.00	0.21	100.00	100.00
	J		0.00	0.00	0.00	100.00	100.00
TOTALS		1.53E 07	66.83				

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TOTAL RAW PARTICLES.... 18399/25105-- 73.03%
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AUMBER MEAR DIAMETER... 114.93 MICROMETERS 3.D.... 103.46

VOLUME MEAN DIAMETER... 203.06 MICROMETERS S.D.... 320.23

SAUPER MEAN DIAMETER... 335.23 MICROMETERS

 DNO.1...
 0.00 MICROMETERS

 DNO.5...
 70.62 MICROMETERS

 DNO.9...
 255.89 MICROMETERS

 DVO.9...
 703.72 MICROMETERS

 DVO.9...
 703.72 MICROMETERS

D8-46,90 Degrees,50 mph,Garlon

DTG 84/09/17 14:19:00

30 psi 1.5 gpm

DFM=2.0--1.5 MHz

UPPER						ACCUS	MULATED
LIMIT	N(RAW)	M/SEC	qm/SEC	<u>8 N</u>	%_VOL.	<u>₹_¼</u>	% VOL.
56	1457	8.75E 06	0.29	48.16	0.49	43.16	0.49
89	1617	2.63E 06	0.52	14.50	0.89	62.66	1.39
122	1945	1.47E 06	0.89	8.09	1.52	70.75	2.91
154	1664	1.61E 06	2.20	8.84	3.75	79.59	6.66
187	1011	1.06E 06	2.75	5.85	4.71	85.45	11.37
219	776	656641	2.87	3.61	4.90	89.06	16.28
252	639	449658	3.06	2.48	5.23	91.53	21.51
284	561	363326	3.65	2.00	6.23	93.53	27.74
318	475	277560	3.99	1.53	6.82	95.06	34.56
351	410	234157	4.58	1.29	7.83	96.35	42.38
382	419	185310	4.73	1.02	8.08	97.37	50.47
414	326	122206	4.02	0.67	6.87	93.04	57.34
447	297	93950	3.92	0.52	6.69	98.56	64.03
479	248	84653	4.39	0.47	7.50	99.03	71.53
512	173	50915	3.24	0.28	5.53	99.31	77.06
545	124	51190	3.94	0.28	6.73	99.59	83.79
5 7 8	86	24 3 3 7	2.25	0.13	3.84	99.72	87.63
611	55	18756	2.06	0.10	3.51	99.83	91.14
644	32	12263	1.58	0.07	2.70	99.89	93.84
677	23	6957	1.05	0.04	1.79	99.93	95.63
710	10	5870	1.02	0.03	1.75	99.96	97.37
743	4	1949	0.39	0.01	0.67	99.98	98.04
776	2	1 30 5	0.30	0.01	0.51	99.98	98.55
809	2 2	2516	0.68	0.01	1.15	100.00	99.71
842	2	575	0.17	0.00	0.29	100.00	100.00
875	O	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.825 07	58.54				

TOTAL RAW PARTICLES.... 12358/18043-- 68.47%

NUMBER MEAN DIAMETER... 103.95 MICROMETERS S.D.... 97.75

VOLUME MEAN DIAMETER... 183.32 MICROMETERS S.D.... 282.70

SAUTER MEAN DIAMETER... 302.58 MICROMETERS

D_{M0.1}... 0.00 MICROMETERS D_{V0.1}... 177.65 MICROMETERS D_{V0.5}... 382.04 MICROMETERS R.S.... 1.10 D_{N0.9}... 231.99 MICROMETERS D_{V0.9}... 599.78 MICROMETERS

Reference #12

DTG 84/09/18 15:54:00 30 psi

1.5 gpm

100.00

DFM=2.0--1.5 MHz

ACCUMULATED UPPER qm/SEC % N N(RAW) N/SEC % VOL. % VOL. LIMIT # N 0.28 45.87 0.29 56 2073 8.63E 06 45.87 0.29 0.46 12.33 3825 2.32E 06 0.76 89 1.57 1.31E 06 122 3922 1.66E 06 3.87 154 4195 1.35E 06 3405 7.42 187 2367 11.41 219 252 1823 15.65 284 1522 20.25 318 1297 25.03 30.34 351 1156 1099 35.99 382 976 41.90 414 447 819 47.72 479 619 52.82 512 533 58.08 545 456 63.37 578 315 67.30 271 71.82 611 644 203 75.70 677 139 78.79 710 125 81.60 7571 1.97 0.04 2.00
40 7115 2.09 0.04 2.12
28 4710 1.56 0.03 1.58
26 6249 2.31 0.03 2.35
11 2134 0.88 0.01 0.89
6 1263 0.58 0.01 0.59
2 309 0.16 0.00 0.16
4 596 0.33 0.00 0.34
1 148 0.09 0.00 0.09
0 0 0.00 0.00 0.00
2 496 0.37 0.00 0.37
0 0 0.00 0.00 0.00
2 496 0.37 0.00 0.37
0 0 0.00 0.00 0.52
1 575 0.55 0.00 0.56
0 0 0.00 0.00 0.56
0 0 0.00 0.00 0.00
0 0.00 0.00 0.00
0 0 0.00 0.00 0.00
0 0 0.00 0.00 0.00
0 0 0.00 0.00 0.00
0 0 0.00 0.00 0.00
0 0 0.00 0.00 0.00
0 0 0.00 0.00 0.00 743 95 84.08 776 86.40 88.40 809 99.90 842 90.52 875 99.93 92.10 908 99.96 94.44 99.97 941 95.34 974 99.98 95.92 1007 99.98 96.08 1040 99.99 96.42 99.99 1073 96.51 1106 99.99 96.51 1139 99.99 96.39 1172 99.99 96.89 1205 99.99 97.40 1238 99.99 97.96 1271 99.99 97.96 1304 99.99 97.96 1337 99.99 97.96 1370 99.99 97.96 1403 99.99 97.96 1436 99.99 97.96 1469 99.99 97.96 1502 0 0 0.00 0.00 0.00 99.99 97.96 1535 0 0 0.00 0.00 0.00 99.99 97.96 0.00 0.00 0.00 99.99 2.01 0.01 2.04 100.00 0.00 0.00 0.00 100.00 0 0 97.96 1568 1601 1 968 100.00

TOTALS 1.88E 07 98.53

TOTAL RAW PARTICLES.... 31454/38168-- 82.41%

0

NUMBER MEAN DIAMETER... 117.49 MICROMETERS S.D.... 115.57

VOLUME MEAN DIAMETER... 215.53 MICROMETERS S.D.... 371.26

SAUTER MEAN DIAMETER... 368.62 MICROMETERS

DN0.1... 0.00 MICROMETERS D_{V0.1}... 208.29 MICROMETERS

D_{N0.5}... 67.32 MICROMETERS D_{V0.5}... 461.59 MICROMETERS R.S.... 1.35

D_{N0.9}... 262.52 MICROMETERS D_{V0.9}... 833.44 MICROMETERS

1634

DTG 84/09/18 13:23:00

qm/SEC

0.35

0.63

1.06

30 psi 1.5 gpm

% VOL.

0.46

0.82

1.37

ACCUMULATED

% VOL.

0.46

1.28

2.65

R.S.... 1.39

8 11

49.63

64.35 72.39

DFM=2.0--1.5 MHz

8 1

49.63

14.72

8.03

1-2	3000	, 00			_ , ,		- • 0 3	
154	4751	1.75E 06 1.21E 06 807152 561111 422822	2.39	8.08	3.10	80.46	5.74	
107	3464	1 215 06	2 14	5 50	4 06	06 05	0 00	
107	3404	1.21E 00	3.14	3.33	4.00	00.05	9.00	
219	2539	807152	3.53	3.72	4.56	89.78	14.36	
252	1906	561111	3.82	2.59	4.94	92.36	19.31	
284	1563	422822	4 25	1.95	5 49	94 31	24 80	
204	1165	202240	4 07	1 21	5 27	74.71	24.00	
318	1102	283340	4.07	1.31	5.21	95.62 96.69	30.07	
318 351	963	283340 231221	4.52	1.07	5.27 5.85	96.69	35.92	
332	723	168272	4.30	0.78	5.56	97.46	41.48	
	F 7 0	133272	4 55	0.74	5.00	00 10	47.36	
414	5/9	168272 138294 87810	4.55	0.04	5.89	99.10	47.36	
447	384	87310	3.66	0.41	4.73	98.51	52.10	
479	320 236	74420 51030	3.86	0.34	4.99 4.19	98.85 99.09	57.09	
512	226	51030	2 24	0.24	4 10	00 00	61.28	
		21030	3.24	0.24	4.15	99.09	01.20	
545	152	41740 31797 25793	3.21	0.19	4.16	99.28	65.44	
578	141	31797	2.94	0.15	3.80	99.43	69.24	
611	115	25793	ว่อจ	0.12	3.66	99 54	72.89	
	113	23733	2.03	0.12	4 67	00 67	72.05	
644	78 6 2	28007 13655	3.01	0.13	4.0/	99.07	77.56	
677	62	13655	2.05	0.06	2.66	99.74	80.22	
710	47	18459	3,21	0.09	4.16	99.82	84.37	
743	25	18459 7762	1 55	0 04	2 01	99 96	96 39	
	35	1102	1.55	0.04	2.01	33.00	00.30	
776	30	7518	1.72	0.03	2.22	99.89	88.61	
809	47 35 30 19 20	7762 7518 8823 4437 1743 2576	2,29	0.04	2.96	99.93	91.57	
842	2 u	4437	1.30	0.02	1.69	99.95	93.26	
875	11	1747	0.50	0.01	0.74	00.06	04.00	
	11 10 4 6 1 2 1	1743 2576	0.50	0.01	0.74	99.90	94.00	
808	10	2576	0.95	0.01	1.23	99.97	95.23	
941	4	436 1891	0.18	0.00	0.23 1.12	99.93	95.47	
974	6	1891	0.87	0.01	1 12	99 93	96.59	
	ĭ	400	0.37	2.00	0 22	00.00	06.03	
1007	1	458	U.25 0.29 0.32	0.00	0.32	99.99	96.91	
1040	2	514	0.29	0.00 0.00	0.37	99.99	97.23	
1073	1	525	0.32	0.00	0.42	99.99	97.70	
	1	305	0 27	0 60	2 35	00 30	99.04	
1105 1139	1	39 5 767	0.27 0.57	0.00	2.33	122.02	00 73	
1139	1	757	0.57	0.99	1.13	99.99 99.99 99.99 99.39 100.00	93.73	
1172		΄,	0.00 0.00	J. 10	0.00	100.00	33.78	
1205) j	.)	0.00	0.00	0.00	100.00	93.73	
1233	;)	2.02	2 22	3 33	100 00	03 73	
	J	J	3.0.7	0.00	0.00	133.07	23.73	
1271	0 0	0 0	0.00	0.99	0.99	110.07	93.78	
1334	ن	0	0.00	0.00	0.00	100.00	98.73	
1337	i C	7 3 7	0.95	0.00	1.22	100.00	100.00	
1 27.1		, , ,	2 00	0.00	0.00	101 00	122 20	
1 370	Ü	<u>J</u>	0.00	0.00	0.00 0.00 0.00 0.00 1.22 0.00	100.00	133.00	
CLATCI		2.17E 07	77.32					
TOTAL RAW	PARTIC	LES 30	433/40231	75.69	5 %			
JJ13ER ME	AJ DIN	CTER 101	.59 MICRO	METERS	3.D	99.94		
VULUME ME	SAID RAS	ETER 189	.64 MICRO	METERS	S.D	331.49		
CATIBED 47	BUT OTBI	10mmn 33F	OF MEADO	115 7 5 6 6				

Dvo.1... 188.39 MICROMETERS

D_{V0.5}... 432.69 MICROMETERS

Dvo.9... 791.02 MICROMETERS

D_{HO.1}... 0.00 MICROMETERS

D_{33.5}... 57.10 MICROMETERS

D_{10.9}... 222.32 MICROMETERS

SAUTER MEAN DIAMETER... 335.85 MICROMETERS

UPPER

LIMIT

56

89

122

N (RAW)

1867

4236

5000

NZSEC

1.08E 07

3.19E 06

1.74E 06

Reference #12

D8-46,90 Degrees,50 mph,Roundup

DTG 84/09/18 08:45:00 30 psi 1.5 gpm DFM=2.0--1.5 MHz ACCUMULATED UPPER A(RAW) W/SEC gm/SEC % N &_VOL. LIMIT 8 N % VOL.

 4E 06
 0.32
 49.47
 0.47

 9E 06
 0.55
 14.31
 0.83

 7E 06
 0.95
 8.05
 1.42

 5E 06
 2.25
 8.46
 3.37

 7E 06
 3.02
 5.98
 4.51

 68692
 2.92
 3.43
 4.37

 39950
 3.68
 2.77
 5.50

 36870
 3.38
 1.73
 5.05

 55287
 3.67
 1.31
 5.48

 94641
 3.81
 1.00
 5.69

 33176
 3.91
 0.79
 5.84

 20474
 3.97
 0.62
 5.93

 34211
 4.34
 0.53
 6.49

 56744
 3.46
 0.34
 5.17

 50830
 3.87
 0.31
 5.73

 48891
 3.76
 0.25
 5.62

 35969
 3.32
 0.18
 4.96

 24756
 2.71
 0.13
 4.05

 22560
 2.91
 0.12
 4.34

 9601
 1.44
 0.05
 2.46

 6437
 1327 9.64E 06 56 0.32 49.47 0.47 49.47 0.47 1995 14.31 0.83 2.79E 06 0.55 89 63.77 1.30 1.57E 06 2432 71.83 122 2.73 2105 154 1.65E 06 80.29 6.09 1.17E 06 1484 86.27 10.60 187 668692 219 1121 89.70 14.97 539950 252 991 92.47 20.47 744 336870 94.20 284 25.52 605 255287 95.51 318 31.00 496 194641 351 96.51 36.69 391 153176 97.29 382 42.53 405 120474 97.91 48.46 414 104211 54.95 447 379 98.45 66744 479 308 93.79 60.12 65.89 512 288 60830 99.10 545 254 488**91** 39.35 71.52 99.54 . 573 195 35969 75.43 30.53 611 151 24756 99.67 120 22560 644 99.78 84.83 9601 9446 6437 84 99.83 87.03 677 68 99.88 710 89.49 743 36 99.91 91.41 5801 3742 776 20 99.94 93.40 839 15 99.96 94.85 2379 842 14 99.97 35.39 2543 375 ક 99.99 97.15 3 908 195 121 99.99 97.26 2 341 99.99 97.33 974 1 99.99 97.36 1007 0 99.99 97.35 1040 1 99.99 97.42 1073 1 99.99 97.46 1105 0 99.99 97.45 1139 1 100.00 99.30 100.00 1172 0 99.90 1235 1 100.00 100.00 1239 100.00 100.00 66.94 TOTALS 1.95E 07 TOTAL RAG PARTICLES.... 16046/22200-- 72.28% MUMBER MEAN DIAMETER... 102.01 MICROMETERS S.D.... 99.11 VOLUME MEAN DIAMETER... 187.28 MICROMETERS S.D.... 315.40 SAUTER MEAN DIAMETER... 324.70 MICROMETERS DNO.1... 0.00 MICROMETERS DVO.1... 182.87 MICROMETERS

D_{V0.5}... 422.15 MICROMETERS

R.S.... 1.27

Reference #12

D_{NO.5}... 57.49 MICROMETERS

DNO.9... 223.02 MICROMETERS DVO.9... 718.24 MICROMETERS

D8-46,0 Degrees,40 psi,50 mph, 1.84 gpm, Water

DTG 83/04/14 09:49:11

DFM=2.0--2.0 MHz

UPPER						ACCUM	ULATED
LIMIT	N (RAW)	M/SEC	qm/SEC	N N	VOL.	8 N	% VOL.
56	2480	7.11E 06	0.23	44.71	0.21	44.71	0.21
89	4900	2.28E 06	0.45	14.34	0.40	59.04	0.61
122	4191	1.05E 06	0.64	6.58	0.56	65.62	1.17
154	3848	1.07E 06	1.46	6.70	1.29	72.32	2.46
187	3014	948596	2.46	5.96	2.17	78.29	4.63
219	2228	717337	3.14	4.51	2.77	82.80	7.41
252	1735	550981	3.75	3.46	3.32	86.26	10.73
284	1501	415550	4.17	2.61	3.69	88.87	14.42
318	1336	346889	4.99	2.18	4.41	91.05	18.83
351	1077	268303	5.25	1.69	4.64	92.74	23.47
382	96 3	250602	6.40	1.58	5.66	94.32	29.13
414 447	890 692	164700 153751	5.42 6.41	1.04 0.97	4.80 5.67	95.35 96.32	33.93 39.60
479	585	147612	7.65	0.93	6.77	97.25	46.37
512	414	96 196	6.11	0.60	5.41	97.85	51.78
545	398	79528	6.12	0.50	5.42	98.35	57.19
578	286	52871	4.88	0.33	4.32	98.68	61.51
611	2 26	50092	5.49	0.31	4.86	99.00	66.37
644	197	38478	4.96	0.24	4.39	99.24	70.76
677	161	35965	5.41	0.23	4.78	99.47	75.54
710	109	18163	3.16	0.11	2.80	99.58	78.34
743	96	12753	2.55	0.08	2.26	99.66	80.59
776	57	4625	1.06	0.03	0.94	99.69	81.53
809	56	9357	2.43	0.06	2.15	99.75	83.68
842	33	12038	3.54	0.08	3.13	99.83	86.81
875	26	3814	1.26	0.02	1.11	99.85	87.92
908	28	7373	2.73	0.05	2.41	99.90	90.33
941	20	4819	1.99	0.03	1.76	99.93	92.09
974	15	2488	1.14	0.02	1.01	99.94	93.10
1007	11 3	3072	1.56	0.02	1.38	99.96 99.96	94.48
1040 1073	6	234 1643	0.13 1.01	0.00 0.01	0.12 0.90	99.90	95.49
1106	2	202	0.14	0.01	0.90	99.97	95.61
1139	0	0	0.00	0.00	0.00	99.97	95.61
1172	Ö	Ö	0.00	0.00	0.00	99.97	95.61
1205	2	433	0.38	0.00	0.34	99.98	95.95
1238	ī	539	0.51	0.00	0.45	99.98	96.40
1271	ō	0	0.00	0.00	0.00	99.98	96.40
1304	2	292	0.33	0.00	0.29	99.98	96.69
1337	0	0	0.00	0.00	0.00	99.98	96.69
1370	2	2889	3.74	0.02	3.31	100.00	100.00
1403	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.59E 07	113.05				
-01110		11375 07	113.03				

TOTAL RAW PARTICLES.... 31591/37167-- 85.00%

NUMBER MEAN DIAMETER... 126.12 MICROMETERS S.D.... 130.60

VOLUME MEAN DIAMETER... 238.64 MICROMETERS S.D.... 397.59

SAUTER MEAN DIAMETER... 412.31 MICROMETERS

Reference #4

D8-46,90 Degrees,40 psi,50 mph, 1.84 gpm, Water DTG 83/05/23 11:09:43

DFM=2.0--1.5 MHz

UPPER						ACCÚN	ULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	8 N	% VOL.	8_N	% VOL.
56	4207	1.34E 07	0.44	53.90	0.45	53.90	0.45
89	5413	2.92E 06	0.58	11.77	0.60	65.67	1.05
122	5751	1.53E 06	0.93	6.17	0.96	71.83	2.01
154	5843	2.00E 06	2.74	8.08	2.82	79.91	4.83
187	36 0 4	1.44E 06	3.74	5.82	3.85	85.73	8.68
219	2289	86 01 5 3	3.76	3.47	3.88	89.20	12.55
252	1903	567581	3.87	2.29	3.98	91.50	16.54
284	1649	489923	4.92	1.98	5.07	93.47	21.61
318	1373	332865	4.78	1.34	4.93	94.82	26.54
3 51	1113	273481	5.35	1.10	5.51	95.92	32.05
382	918	243515	6.22	0.98	6.41	96.90	38.46
414	814	187746	6.18	0.76	6.37	97.66	44.83
447	700	141595	5.90	0.57	6.08	98.23	50.91
479	582	93143	4.83 5.24	0.38	4.98 5.40	98.61	55.89
512	450	82513	4.36	0.33	4.49	98.94 99.17	61.30 65.79
545	422 379	5661 7 52700	4.36	0.23 0.21	5.02	99.17	70.80
578 611	379	38335	4.20	0.15	4.33	99.54	75.13
644	252	22817	2.94	0.09	3.03	99.63	78.17
677	197	23406	3.52	0.09	3.63	99.72	81.79
710	184	14870	2.59	0.06	2.67	99.78	84.46
743	144	13637	2.73	0.06	2.81	99.84	87.27
776	101	9368	2.14	0.04	2.21	99.88	89.48
809	76	9977	2.59	0.04	2.67	99.92	92.15
842	49	5878	1.73	0.02	1.78	99.94	93.93
875	3 3	8478	2.80	0.03	2.89	99.97	96.82
908	22	1990	0.74	0.01	0.76	99.98	97.58
941	27	1246	0.51	0.01	0.53	99.99	98.11
974	9	476	0.22	0.00	0.23	99.99	98.33
1007	12	1331	0.68	0.01	0.70	99.99	99.03
1040	1	19	0.01	0.00	0.01	99.99	99.04
1073	2	301	0.19	0.00	0.19	100.00	99.23
1106	1	6 2 3	0.42	0.00	0.43	100.00	99.66
1139	1	11	0.01	0.00	0.01	100.00	99.67
1172	0	0	0.00	0.00	0.00	100.00	99.67
1205 1238	0 1	0	0.00	0.00	0.00	100.00	99.67
1236	0	335 0	0.32 0.00	0.00 0.00	0.33 0.00	100.00	100.00
	U			0.00	0.00	100.00	100.00
TOTALS		2.48E 07	97.03				

TOTAL RAW PARTICLES.... 38853/47850-- 81.20%

NUMBER MEAN DIAMETER... 102.10 MICROMETERS S.D.... 105.11

VOLUME MEAN DIAMETER... 195.64 MICROMETERS S.D.... 328.26

SAUTER MEAN DIAMETER... 348.73 MICROMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.5}...$ 198.20 MICROMETERS $D_{V0.5}...$ 442.35 MICROMETERS R.S.... 1.32

D_{N0.9}... 230.90 MICROMETERS D_{V0.9}... 781.92 MICROMETERS

Reference #4

D8-46, 0 DEGREES, 40 PSI, 100 MPH, 1.84 gpm, Water DTG 81/04/14 11:28:45

DFM=2.0--3.0 MHz

UPPER						20011	IIII AMEN
LIMIT	N (RAW)	N/SEC	qm/SEC	11 &	8 001		ULATED
				₹ <u>1</u> 1	₹ AOT.	<u>₹ 11</u>	% VOL.
56	1442	5.22E U6	U.17	30.64	0.15	30.64	0.15
89	26 06	2.53E 06	0.50	14.87	0.45	45.51	0.60
122	2341	1.58E 06	Ü.9ō	9.28	0.86	54.79	1.46
154	2585	1.81E 06	2.48	10.64	2.22	65.43	3.68
187	2412	1.330 06	4.23	9.58	3.78	75.01	7.45
219	1974	1.04E 06	4.54	6.09	4.06	81.10	11.51
252	1641	750841	5.12	4.41	4.57	85.51	16.08
284	1560	5 3 2 2 9 6	6.35	3.71	5.68	89.22	21.76
318	1546	502820	7.23	2.95	6 . 46	92.17	28.22
351	1298	323494	6.33	1.90	5.66	94.07	33.88
382	1019	237770	5.07	1.40	5.43	95.46	39.30
414	799	1786 26	5.88	1.05	5. 25	95.51	44.56
447	669	111144	4.63	0.65	4.14	97.17	48.70
479	607	116837	6.06	0.69	5.41	97.85	54.11
512	510	85157	5.41	0.50	4.84	98.35	58.95
545	4 C 7	61203	4.71	0.36	4.21	98.71	63.16
578	348	38942	3.60	0.23	3.21	98.94	66.38
611	279	40908	4.48	0.24	4.01	99.18	70.39
6 4 4	216	27093	3.49	0.16	3.12	99.34	73.51
677	191	2 26 25	3.40	0.13	3.04	99.47	76.55
710	160	21459	3.74	0.13	3.34	99.60	79.89
743	110	17612	3.52	0.10	3.15	99.70	
776	74	13058	2.99	90.08	2.67	99.78	85.71
809	54	3778	0.98	0.02	0.88	99.80	86.58
842	41	4123	1.21	0.02	1.08	99.82	87.67
875	30	3680	1.22	0.02	1.09	99.84	88.75
908	17	5 56 4	2.06	0.03	1.84	99.88	90.59
941	17	4886	2.02	0.03	1.80	99.91	92.39
974	6	4288	1.97	0.03	1.76	99.93	94.15
1007	8	2558	1.30	0.02	1.15	99.95	95.31
1040	10	8576	4.80	0.05	4.29	100.00	99.60
1073	1	80	0.05	0.00	0.04	100.00	99.65
1106	1	125	90.08	0.00	0.08	100.00	99.72
1139 1172	1	140	0.10	0.00	0.09	100.00	99.82
1205	2 0	256	0.21	0.00	0.18	100.00	
1205	U	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.70E 07	111.88				

TOTAL RAW PARTICLES.... 24982/28862-- 86.56%

NUMBER MEAN DIAMETER... 140.10 MICROMETERS S.D.... 120.81

VOLUME MEAN DIAMETER... 232.43 MICROMETERS S.D.... 371.23

SAUTER MEAN DIAMETER... 366.93 MICPOMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 207.66 MICROMETERS $D_{N0.5}...$ 104.91 MICROMETERS $D_{V0.5}...$ 454.75 MICROMETERS $D_{V0.5}...$ 896.87 MICROMETERS

Reference #4

D8-46,90 Degrees,40 psi,100 mph, 1.84 gpm, Water

DTG 83/05/06 08:52:56

DFM=2.0--3.0 MHz

UPPER						ACCUI	MULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>8 </u>	<pre>%_VCL.</pre>	<u>8 N</u>	%_VOL.
56	1411	1.53E 07	0.50	46.42	0.60	46.42	0.60
89	1892	4.03E 06	0.80	12.22	0.96	58.64	1.56
122	1858	2.36E 06	1.43	7.15	1.71	65.79	3.27
154	20 27	3.32E 06	4.55	10.09	5.45	75.88	8.72
187	1754	2.86E 06	7.42	8.70	8.89	84.58	17.61
219	1280	1.58E 06	6.89	4.78	8.25	89.36	25.86
252	955	1.00E 06	6.83	3.04	8.18	92.40	34.04
284	925	757024	7.60	2.30	9.11	94.70	43.15
318	940	671012	9.65	2.04	11.55	96.74	54.70
351	685	411420	8.05	1.25	9.64	97.99	64.34
382	414	207667	5.30	0.63	6.35	98.62	70.69
414	320	117643	3.87	0.36	4.64	98.97	75.33
447	206	118127	4.92	0.36	5.90	99.33	81.23
479	160	54499	2.83	0.17	3.38	99.50	84.61
512	103	71999	4.58	0.22	5.48	99.72	90.09
545	67	53508	4.12	0.16	4.93	99.88	95.03
578	44	29845	2.76	0.09	3.30	99.97	98.33
611	21	4735	0.52	0.01	0.62	99.98	98.95
644	13	1742	0.22	0.01	0.27	99.99	99.22
677	10	1032	0.16	0.00	0.19	99.99	99.41
710	5	1190	0.21	0.00	0.25	100.00	99.65
743	3 2	513	0.10	0.00	0.12	100.00	99.78
776		783	0.18	0.00	0.21	100.00	99.99
809	0 1	0	0.00	0.00	0.00	100.00	99.99
842		25	0.01	0.00	0.01	100.00	100.00
8 7 5	0	0	_0.00	0.00	0.00	100.00	100.00
TOTALS		3.29E 07	83.49				

TOTAL RAW PARTICLES.... 15096/18695-- 80.75%

NUMBER MEAN DIAMETER... 105.57 MICROMETERS S.D.... 88.55

VOLUME MEAN DIAMETER... 169.21 MICROMETERS S.D.... 245.02

SAUTER MEAN DIAMETER... 255.21 MICROMETERS

D_{N0.1}... 0.00 MICRCMETERS D_{V0.1}... 159.03 MICROMETEPS

 $D_{N0.5}$... 65.92 MICROMETERS $D_{V0.5}$... 303.87 MICROMETERS R.S.... 1.16

D_{N0.9}... 226.38 MICPOMETERS D_{V0.9}... 511.76 MICROMETERS

Reference #4

D8-46,0 Degrees,40 psi,150 mph, 1.84 gpm, Water
DTG 83/04/28 11:23:50

DFM=2.0--4.0 MHz

UPPER						A CCU	MULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>8 N</u>	% VOL.	. <u>8 N</u>	% VOL.
56	249	5.84C US	0.19	24.91	0.27	24.91	0.27
89	6 2 8	3.68E 06	0.73	15.71	1.02	40.62	1.29
122	1035	2.49E 06	1.51	10.61	2.11	51.22	3.40
154	1583	3.52E 06	4.82	15.04	6.73	66.26	10.13
187	1780 -	2.75E 06	7.13	11.75	9.96	78.01	20.09
219	1940	1.99E 06	8.69	8.48	12.14	86.50	32.23
252	2057	1.07E 06	7.32	4.59	10.22	91.08	42.46
284	1410	940013	9.44	4.01	13.19	95.09	55.64
318	870	474428	6.82	2.02	9.52	97.12	65.17
351	504	196110	3.84	0.84	5.36	97.95	70.52
382	344	159382	4.07	0.68	5.68	98.63	76.21
414	234	106009	3.49	0.45	4.87	99.09	81.08
447	110	69816	2.91	0.30	4.06	99.38	85.15
479	71	80362	4.17	0.34	5.82	99.73	90.96
512	49	15523	0.99	0.07	1.38	99.79	92.34
545	19	4270	0.33	0.02	0.46	99.81	92.80
578	10	1949	0.18	0.01	0.25	99.82	93.05
611	9	26016	2.85	0.11	3.98	99.93	97.04
6 4 4	4	14706	1.90	0.06	2.65	99.99	99.68
677	1	854	0.13	0.00	0.18	100.00	99.86
710	1 3	56 4	0.10	0.00	0.14	100.00	100.00
743	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		2.34E 07	71.60				

TOTAL RAW PARTICLES.... 12910/16191-- 79.74%

NUMBER MEAN DIAMETER... 129.55 MICROMETERS S.D.... 85.90

VOLUME MEAN DIAMETER... 180.10 MICROMETERS S.D.... 245.90

SAUTER MEAN DIAMETER... 241.77 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 153.97 MICROMETERS D_{V0.5}... 270.67 MICROMETERS R.S.... 1.18 D_{V0.9}... 244.66 MICROMETERS D_{V0.9}... 474.35 MICROMETERS

D8-46, 90 Degrees, 40 PSI, 150 MPH, 1.84 gpm, Water D'IG 83/05/06 09:07:57

DFM=2.0--4.0 MHz

UPPER						ACCU	MULATEE	
LIMIT	N(RAW)	N/SEC	qm/SEC	<u>₹ 1</u> 1	%_VCL.	<u>8 N</u>	% VOL.	
56	259	2.01E 07	0.66	48.53	1.83	48.53	1.83	
89	550	7.29E 06	1.45	17.62	4.03	66.15	5.86	
122	561	4.13E 06	2.51	9.99	6.97	76.14	12.84	
154	739	4.53E 06	6.19	10.95	17.22	87.08	30.05	
187	727	2.61E 06	6.77	6.32	18.81	93.40	48.86	
219	611	1.32E 06	5.79	3.20	16.10	96.60	64.95	
252	505	786186	5.36	1.90	14.89	98.50	79.84	
284	144	527169	5.29	1.27	14.72	99.78	94.56	
318	56	52317	0.75	0.13	2.09	99.90	96.65	
351	25	10633	0.21	0.03	0.58	99.93	97.22	
382	11	18152	0.46	0.04	1.29	99.97	98.51	
414	6	4160	0.14	0.01	0.38	99.98	98.89	
447	3	1925	0.08	0.00	0.22	99.99	99.12	
479	1	36 24	0.19	0.01	0.52	100.00	99.64	
512	3	2044	0.13	0.00	0.36	100.00	100.00	
545	0	<u>C</u>	_0.00	0.00	C.00	100.00	100.00	
TOTALS		4.14E 07	35.98					
TOTAL R	AW PARTI	CLES	4201/ 581	14 72.	26 %			
NUMBER	WEAR DIA	MEMBER	00 54 440		0 0	53.00		

NUMBER MEAN DIAMETER... 83.54 MICROMETERS S.D.... 57.20

VOLUME MEAN DIAMETER... 118.47 MICROMETERS S.D.... 156.16

SAUTER MEAN DIAMETER... 162.23 MICROMETERS

DV0.1... 108.52 MICROMETERS D_{N0.1}... 0.00 MICROMETERS D_{N0.5}... 59.02 MICROMETERS D_{V0.5}... 189.29 MICROMETERS R.S.... 0.88 DNO.9... 169.52 MICROMETERS DV0.9... 274.57 MICROMETERS

D8-46,0 Degrees,40 psi,50 mph,3 oz Nalco-Trol/100 gal water DTG 84/09/24 15:07:00

DFM-2.0--1.5 MHz

1.38 gpm

UPPER						A CCU 4	ULATED
LIMIT	U(RAU)	3/SEC	qm/SEC	\$ 3	% VOL.	\$_: <u>3</u>	% VOL.
56	630		0.06				0.09
89	1490	1.74E 06 510584	0.00	38.87 11.41	0.09 0.16	33.87 50.29	0.09
122	2138	315643	0.10	7.05	0.10	57.34	0.24
154	2458	38 33 62	0.52	8.57	0.81	65.90	1.35
187	2045	325657	0.84	7.28	1.30	73.18	2.65
219	1414	222250	0.97	4.97	1.50	78.15	4.15
252	1113	167267	1.14	3.74	1.76	81.88	5.91
284	937	142425	1.43	3.18	2.21	85.07	8.11
318	790	113781	1.64	2.54	2.52	87.61	10.63
351	663	92203	1.80	2.06	2.78	89.67	13.42
382	553	77720	1.98	1.74	3.06	91.41	16.48
414	459	53197	1.92	1.30	2.96	92.71	19.43
447	404	52762	2.20	1.18	3.39	93.89	22.82
479	350	43662	2.26	0.93	3.49	94.86	26.31
512	256	30957	1.97	0.69	3.03	95.55	29.35
545	223	30115	2.32	0.67	3.58	96.23	32.92
578	166	19839	1.83	0.44	2.83	96.67	35.75
611	163	20167	2.21	0.45	3.41	97.12	39.16
644	118	15541	2.00	0.35	3.09	97.47	42.25
677	122	14634	2.20	0.33	3.39	97.80	45.64
710	102	14162	2.46	0.32	3.80	98.11	49.44
743	96	12486	2.50	0.28	3.85	98.39	53.30
776	8 5	12329	2.82	0.28	4.35	98.67	57.64
809 842	83 76	9202 8544	2.39 2.51	0.21 0.19	3.69 3.87	98.87 99.06	61.33 65.20
875	70	8453	2.79	0.19	4.31	99.25	69.51
908	49	5910	2.19	0.13	3.37	99.38	72.88
941	42	4788	1.98	0.11	3.05	99.49	75.93
974	45	5151	2.36	0.12	3.64	99.61	79.57
1007	34	3272	1.66	0.07	2.56	99.68	82.13
1040	24	3052	1.71	0.07	2.64	99.75	84.76
1073	21	1866	1.15	0.04	1.77	99.79	86.53
1106	24	2457	1.66	0.05	2.56	99.84	89.09
1139	9	723	0.53	0.02	0.82	99.86	89.92
1172	5	1054	0.85	0.02	1.31	99.88	91.23
1205	5	686	0.60	0.02	0.93	99.90	92.16
1238	9	2147	2.04	0.05	3.15	99.95	95.31
1271	4	321	0.33	0.01	0.51	99.95	95.82
1304	5	913	1.02	0.02	1.57	99.97	97.39 97.65
1337	2 1	139	0.17	0.00	0.26	99.93 99.93	97.72
1370	3	38	0.05	0.00	0.08 1.10	99.99	98.32
1403 1436	1	511 105	0.71 0.16	0.01	0.24	99.99	99.05
1469	1	220	0.35	0.00	0.54	100.00	99.61
1502	Ō	0	0.00	0.00	0.00	100.00	99.51
1535	ŏ	ŏ	0.00	0.00	0.00	100.00	99.61
1568	ĭ	131	0.26	0.00	0.39	100.00	100.00
1601	ō	0	0.00	0.00	0.00	100.00	100.00
TOTALS	-	4.47E 06	64.84				
TOTUDO		7.4/6 00	04.04				

TOTAL RAW PARTICLES.... 17291/19526-- 88.55%

NUMBER MEAN DIAMETER... 153.69 MICROMETERS S.D.... 166.31

VOLUME MEAN DIAMETER... 302.59 MICROMETERS S.D.... 497.45

SAUTER MEAN DIAMETER... 540.27 MICROMETERS

DNO.1... 0.00 MICROMETERS DV0.1... 309.00 MICROMETERS D_{NO.5}... 88.45 MICROMETERS D_{VO.5}... 714.27 MICROMETERS R.S.... 1.16 DNO.9... 357.21 MICROMETERS DVO.9...1140.54 MICROMETERS

DTG 84/09/25 13:18:00

1.38 gpm

DFM=2.0--1.5 MHz

		Dr	.4-2.01.	5 MAZ			
UPPER LIMIT	.1(D2.J)	.1/SEC	ga/SEC	3 11	1012		AULATED
56	282 282	374607	0.03	<u>출_권</u> 37.13	%_VOL. 0.05	<u>₹_⅓</u> 37.13	<u>%_V2L.</u>
39	647	256290	0.05	10.83	0.10	43.01	0.15
122 154	1021 1180	172143 200009	0.10 0.27	7.31 8.49	0.20 0.52	55.31 63.80	0.35 0.37
187	1069	169088	0.44	7.18	0.83	70.98	1.69
219	719	113634	0.50	4.83	0.94	75.81	2.64
252 284	614 510	89333 79232	0.61 0.80	3.79 3.36	1.15 1.51	79.61 32.37	3.79 5.29
318	410	56627	0.81	2.40	1.54	85.37	6.83
351 382	351 285	49460 40243	0.97 1.03	2.10 1.71	1.83 1.94	37.47 89.18	8.66 10.61
414	257	35522	1.17	1.51	2.21	90.69	12.82
447	225	28874	1.20	1.23	2.23	91.91	15.10
479 512	196 172	27510 24386	1.43 1.55	1.17 1.04	2.70 2.93	93.08 94.12	17.79 20.73
545	154	21407	1.65	0.91	3.12	95.03	23.84
578 611	119 79	17917 10054	1.65 1.10	0.76 0.43	3.13 2.08	95.79 96.21	25.97 29.06
644	80	10354	1.33	0.44	2.52	96.65	31.58
677	71	7972	1.20	0.34	2.27	96.99	33.85
710 743	58 47	7743 7383	1.35 1.48	0.33 0.31	2.55 2.80	97.32 97.63	36.40 39.19
776	35	4364	1.00	0.19	1.89	97.82	41.08
809 842	32 41	5034 7115	1.31 2.09	0.21 0.30	2.47 3.95	98.03 98.33	43.56 47.51
375	27	4226	1.40	0.18	2.64	93.51	50.15
908	34	3896	1.44	0.17	2.73	99.68	52.83
941 974	32 21	4353 2112	1.80 0.97	0.18 0.09	3.40 1.83	98.86 93.95	56.27 53.10
1007	28	3804	1.93	0.13	3.65	99.11	61.76
1040 1073	21 11	3147 703	1.76 0.43	0.13	3.33 0.82	99.25 99.23	65.09 65.91
1106	22	5009	3.38	0.21	6.40	99.49	72.31
1139	12	1366	1.01	0.06	1.01	99.55	74.22
1172 1205	11 13	837 1862	0.67 1.63	0.04 0.08	1.28 3.09	99.58 99.66	75.49 78.58
1238	7	1137	1.13	0.05	2.14	99.71	30.72
1271 1304	8 6	388 419	0.92 0.47	0.04	1.73 0.88	99.75 99.77	32.45 33.34
1337	6	786	0.95	0.03	1.79	99.80	35.13
1370 1403	3 6	363 1375	0.47 1.91	0.02 0.06	0.39 3.62	99.82 99.88	36.02 39.64
1436	1	39	0.06	0.00	0.11	99.88	89.75
1469	5	365	0.58	0.02	1.11	99.89	90.85
1502 1535	2 3	990 1005	1.70 1.84	0.04	3.21 3.43	99.94 99.98	94.03 97.54
1568	0	0	0.00	0.00	0.00	99.98	97.54
1601 1634	0	0	0.00	0.00	0.00	99.98 99.98	97.54 97.54
1034	U	· ·	0.00	0.00	0.00	33.30	37.34
UPPER	W (D 2 + 1)	11/650	/555	a 11	9 1001		ULATED
LIMIT	N(RAW)	NVSEC		8 - 3	3 VOL.	\$ _ i	%_VOL.
1667 1700	1 0	203 0	0.49	0.01 0.00	0.92 0.00	99.99 99.99	98.46 93.46
1733	1	208	0.55	0.01	1.04	100.00	99.50
1766	1	94 0	0.26	0.00 0.00	0.50 0.30	100.00	100.00 100.00
1799	U		0.00	0.00	0.00	100.00	100.05
CLATCL		2.36E 06	52.86				
TOTAL F	RAW PARTIC	CLES	3936/1029	3 86.8	2%		
NUMBER	MEAN DIA	METER 16	8.88 MICR	OMETERS	S.D	192.84	
VOLUME	MEAN DIA	1ETER 35	0.09 MICR	OMETERS	S.D	595.07	
SAUTER	MEAN DIA	ieter 65	2.96 MICR	OMETERS			

D_{NO.1}... 0.00 MICROMETERS D_{VO.1}... 373.65 MICROMETERS

DNO.9... 399.90 MICROMETERS DVO.9...1443.02 MICROMETERS

D_{N0.5}... 97.94 MICROMETERS D_{V0.5}... 872.63 MICROMETERS R.S.... 1.23

Reference #11

1.38 gpm DTG 84/09/25 08:14:00

DFM=2.0--1.5 MHz

UPPER						ACCUM	ULATED
LIMIT	H(RAW)	Y/SEC	qm/SEC	8 11	% VOL.	3_1	% VOL.
56	272	554 7 97	0.02	31.61	0.02	31.51	0.02
89	664	170082	0.03	9.69	0.04	41.30	0.07
122 154	1160 1474	112425 147215	0.07 0.20	6.41	0.09	47.70	0.15
137	1407	135058	0.20	8.39 7.69	0.26 0.46	56.09 63.78	0.42 0.88
219	1032	38011	0.38	5.01	0.50	68.80	1.38
252	898	79603	0.54	4.54	0.71	73.33	2.09
284	718	60423	0.61	3.44	0.79	76.78	2.98
318 351	674 615	54100 46022	0.78 0.90	3.08 2.62	1.02	79.86 82.43	3.90 5.07
332	515	37957	0.97	2.16	1.27	84.64	6.34
414	473	36249	1.19	2.07	1.56	86.71	7.90
447	414	28459 25408	1.19	1.62	1.55	88.33	9.45
479 512	360 318	21857	1.32	1.45	1.72 1.82	89.73 91.02	11.17 12.99
545	252	18242	1.40	1.04	1.84	92.06	14.82
578	227	16741	1.55	0.95	2.02	93.02	16.84
611	183 139	11950	1.31	0.68	1.71	93.70	18.55
644 6 7 7	144	9821 11102	1.27 1.67	0.56	1.65 2.18	94.26	20.21 22.39
710	130	9568	1.67	0.55	2.18	95.43	24.57
743	113	7581	1.52	0.43	1.98	95.87	26.55
776 809	81 75	6537	1.49	0.37	1.95 2.33	96.24	28.50
842	64	6863 4928	1.78 1.45	0.39 0.28	1.89	96.63 96.91	30.93 32.72
875	46	3131	1.03	0.13	1.35	97.09	34.07
908	63	4450	1.65	0.25	2.15	97.34	36.23
941	4 2 4 6	2738 3951	1.13 1.81	0.16 0.23	1.48 2.37	97.50 97.72	37.70 40.07
974 1007	40	3462	1.76	0.23	2.37	97.92	42.36
1040	34	2753	1.54	0.16	2.01	98.08	44.33
1073	45	4117	2.54	0.23	3.31	98.31	47.69
1106 1139	3 G 4 O	3303 3591	2.23 2.65	0.19 0.20	2.91 3.47	98.50 93.70	50.51 54.07
1172	24	1535	1.24	0.09	1.62	98.79	55.39
1205	23	2166	1.90	0.12	2.43	93.91	53.17
1238	30	2516	2.40	0.14	3.13	99.06	61.30
1271 1304	18 18	2025 1640	2.09 1.83	0.12 0.09	2.73 2.39	99.17 99.27	64.03 56.42
1337	18	1473	1.77	0.03	2.32	99.35	33.74
1370	9	1195	1.55	0.07	2.02	99.42	70.76
1403	15 10	1712	2.33 2.17	0.10	3.11 2.83	99.52 99.50	73.87 75.70
1436 1469	11	1449 1190	1.91	0.08 0.37	2.49	99.67	79.19
1502	5	652	1.12	0.04	1.45	99.70	80.55
1535	7	643	1.18	0.04	1.54	99.74	82.19
1568	7	561	1.09	0.03	1.43	99 .7 7 99 . 79	83.62 84.27
1601 1634	2	238 617	1.36	0.01	1.78	99.82	36.05
1667	3	306	0.72	0.02	0.94	99.84	86.99
1700	2	443	1.10	0.03	1.44	99.86	88.43
1733	0 3	0 542	0.00 1.52	0.00	0.00 1.93	99.85 99.89	88.43 90.41
1766 1799	1	89	0.26	0.01	0.34	99.90	90.76
1832	0	0	0.00	0.00	0.00	99.90	90.76
1865	1	387	1.28	0.02	1.67 0.00	99.92 99.92	92.42
1898 1931	0 1	0 4 30	0.00 1.58	0.00	2.06	99.95	34.43
1951	0	0	0.00	0.00	ე. ეე	39.95	94.43
1997	0	0	0.00	0.00	0.00	99.95	94.48
2030	0	043	0.00	0.00	0.00 5.52	99.95 100.00	94.43
2053 2096	1 0	942 ປ	4.22 0.00	0.00	0.00	100.00	100.00
TOTALS	Ū	1.76E 06	76.53				
TOTALS		2.,00					

TOTAL RAW PARTICLES.... 13007/14051-- 92.57%

NUMBER MEAN DIAMETER... 208.69 MICROMETERS S.D.... 241.73

VOLUME MEAN DIAMETER... 436.84 MICROMETERS S.D.... 742.00

SAUTEP MEAN DIAMETER... 817.43 MICROMETERS

0.00 MICROMETERS D_{N0.5}... 130.64 MICROMETERS D_{V0.5}...1093.64 MICROMETERS D_{V0.9}...1758.61 MICROMETERS DNO.9... 485.23 MICROMETERS

D_{V0.1}... 457.36 MICROMETERS

R.3.... 1.13

1.38 gpm DTG 80/09/02 13:42:00

DF'1=1.0--1.5 MHz

	UPPCP						ACCU:	ULATED
	TIMIL	H(RAW)	M/SEC	<u>43/380</u>	8 N	3 VOL.	<u>8_N</u>	3 VOL.
	56	647	126234	0.00	30.69	0.01	30.69	0.01
	8 9	1445	38010	0.01	9.24	0.03	39.93	0.04
	122	1543	35441	0.02	8.62	0.07	43.55	0.11
	154	1288	28822	0.04	7.01	0.13	55.55	0.25
	187 219	992 727	21089 15969	0.05 0.07	5.13 3.83	0.19 0.24	60.63 64.56	0.43
	252	587	13614	0.09	3.31	0.24	67.87	0.93
	284	480	12533	0.13	3.05	0.43	70.92	1.41
	318	416	9875	0.14	2.40	0.48	73.32	1.89
	351	372	10294	0.20	2.50	0.68	75.82	2.58
	382	365	11229	0.29	2.73	0.97	78.55	3. 5 5
	414	294	8053	0.27	1.96	0.90	80.51	4.45
	447	294 242	8445 8451	0.35 0.44	2.05 2.05	1.20 1.49	82.56	5.65 7.14
	479 512	215	5997	0.38	1.46	1.29	84.62 86.07	8.43
	545	186	5375	0.41	1.31	1.41	87.38	9.84
	578	162	4926	0.45	1.20	1.54	88.58	11.38
	611	127	3782	0.41	0.92	1.41	89.50	12.79
	644	105	4156	0.54	1.01	1.82	90.51	14.61
	677	113	3538	0.53	0.86	1.31	91.37	16.41
	710 743	79 70	2713 1745	0.47 0.35	0.66 0.42	1.60 1.19	92.03 92.45	18.02 19.20
	776	79	4590	1.05	1.12	3.56	93.57	22.77
	809	54	2326	0.60	0.57	2.05	94.13	24.82
	842	43	1143	0.34	0.28	1.14	94.41	25.96
	8 7 5	43	2090	0.69	0.51	2.34	94.92	28.31
	908	34	1838	0.68	0.45	2.31	95.37	30.62
	941	34	2942	1.21 0.36	0.72	4.12 1.23	96.08	34.74
	974 1007	26 23	791 709	0.36	0.19 0.17	1.23	96.27 96.45	35.97 37.19
1	1040	17	566	0.32	0.14	1.08	96.58	38.27
	1073	18	631	0.39	0.15	1.32	96.74	39.59
	1106	17	1826	1.23	0.44	4.19	97.13	43.77
	1139	19	1390	1.40	0.46	4.74	97.54	43.51
	1172	. 8	1559	1.26	0.38	4.27	93.02	52.78
	1205 1238	13 15	452 623	0.40 0.59	0.11 0.15	1.35 2.01	98.13 98.28	54.12 56.14
	1271	10	374	0.39	0.09	1.31	98.37	57.45
	1304	9	1759	1.96	0.43	6.66	93.80	64.11
	1337	11	435	0.52	0.11	1.78	98.90	65.89
	1370	8	313	0.41	0.08	1.38	98.93	67.26
	1403	9 7	392	0.55	0.10	1.85	99.08	69.12
	1436 1469	4	420 200	0.63 0.32	0.10 0.05	2.13 1.09	99.18 99.23	71.25 72.33
	1502	6	256	0.44	0.06	1.49	99.29	73.83
	1535	4	354	0.65	0.09	2.20	99.38	76.02
	1568	- 5	282	0.55	0.07	1.87	99.44	77.89
	1601	1	104	0.22	0.03	0.74	99.47	78.63
	1634	3 2 4	191	0.42	0.05	1.43	99.52	80.06
	1667 1700	2	193 296	0.45 0.74	0.05	1.54	99.56	81.61 84.11
	1733	4	280	0.74	0.07 0.07	2.51 2.51		
	1766	2	199	0.56	0.05	1.89	99.75	38.52
	1799	ī	113	0.33	0.03	1.13	99.73	89.65
	1332	4	416	1.30	0.10	4.42	99.88	94.07
	1865	0	0	0.00	0.00	0.00	99.83	94.07
	1893	2 1	362	1.26	0.09	4.28	99.97	98.35
	1931 1964	0	132 0	0.49	0.03 0.00	1.55 0.00	100.00 100.00	100.00 1 0 0.00
		Ū			0.00	0.00	100.00	100.00
	TOTALS		4.11E 05	29.45				

TOTAL RAW PARTICLES.... 11279/12736-- 88.56%

NUMBER MEAN DIAMETER... 247.73 MICROMETERS S.D.... 294.73

VOLUME MEAN DIAMETER... 515.36 MICROMETERS S.D.... 812.70

SAUTER MEAN DIAMETER... 923.37 MICROMETERS

DNO.1... 0.00 MICROMETERS DV0.1... 548.02 MICROMETERS DV0.5... 128.46 MICROMETERS DV0.5... 1150.00 MICROMETERS DV0.9... 1801.11 MICROMETERS

30 psi 1.62 gpm DFM=1.0--1.5 MHz UPPER ACCU:IULATED LIMIT H (RAW) 4/SEC 92/500 11. 8 NOL. N & VCL. 3.83E 06 5093 0.13 63.71 56 0.12 63.71 0.12 605195 89 6506 0.12 10.07 0.11 73.78 0.23 4576 395977 122 0.24 6.59 0.22 80.38 0.45 154 3331 0.42 5.11 0.38 85.49 0.83 187 1527 146477 0.38 2.44 0.35 87.93 219 847 82393 0.36 1.37 0.33 89.30 252 678 63129 0.43 1.05 0.39 90.35 1.90 284 600 43866 0.44 0.73 0.40 91.08 0.71 0.85, 318 623 49616 0.83 0.65 91.91 2.96 351 599 43335 0.72 0.78 92.63 3.73 382 562 46059 1.18 0.77 1.08 93.39 4.81 414 595 39537 1.30 0.66 1.19 94.05 6.00 447 480 38344 1.60 0.64 1.46 94.69 7.47 424 376 479 36426 1.89 0.61 1.73 95.30 9.20 512 35339 2.25 0.59 2.06 95.89 11.25 545 331 19592 1.51 0.33 1.38 96.21 12.63 578 313 21665 2.00 0.36 1.83 96.57 14.47 611 246 20577 2.26 0.34 2.07 96.91 16.53 2.71 644 215 20993 0.35 2.48 97.26 19.01 677 189 15773 2.37 0.26 2.17 97.53 21.18 710 193 18103 3.15 0.30 2.89 97.83 24.07 743 150 11756 2.35 0.20 2.15 98.02 26.22 776 144 10824 2.48 0.18 2.27 98.20 28.49 809 103 7580 1.97 0.13 1.80 98.33 30.29 842 84 15797 4.64 0.26 4.25 98.59 34.54 875 78 9368 3.09 0.16 2.83 98.75 37.37 908 91 7149 2.64 0.12 2.42 98.87 39.79 941 69 6521 2.69 0.11 2.46 98.98 42.26 2.34 974 52 5111 0.09 2.15 99.06 44.40 1007 40 3672 1.86 0.06 1.71 99.12 46.11 4.74 1040 40 8473 0.14 4.34 99.26 50.45 1073 30 3038 1.87 0.05 1.71 99.31 52.17 1106 40 3931 2.66 0.07 2.43 99.38 54.60 5.21 0.78 1139 28 7054 0.12 4.77 99.50 59.37 964 1172 18 0.02 0.71 99.51 60.08 1205 17 2211 1.94 0.04 1.78 99.55 61.86 1238 14 1422 1.35 0.02 1.24 99.57 63.10 1271 17 2812 2.90 0.05 2.66 99.62 65.75 3096 3.45 1304 15 0.05 3.16 99.67 68.91 0.04 1337 15 2628 3.16 2.89 99.72 71.81 0.02 1.70 1370 10 1434 1.86 99.74 73.51 4.42 0.05 1403 12 3176 4.05 39.79 77.56 1435 7 675 0.01 0.92 99.80 78.49 1587 2.54 5.13 2.33 4.70 99.83 1459 10 0.03 30.81 0.05 99.38 2994 1502 8 85.50 2078 3.30 40.03 3.49 99.91 88.93 1535 0.01 99.92 89.31 1563 462 0.90 0.83 3.78 1.28 1819 99.95 1601 0.03 3.46 93.27 0.01 99.96 580 1.19 94.45 1634 1667 1 320 0.75 0.01 0.69 99.97 95.13 0.40 1700 0.00 99.97 1 162 0.37 95.50 4.02 0.03 1733 1520 100.00 3 3.68 99.18 1766 0.00 0.00 0.00 99.18 ٥ Ω 100.00 Ō 0.00 0.00 1799 0.00 0 100.00 99.18 93 0.29 0.27 99.45 1832 0.00 100.00 0 0.00 0.00 99.45 1865 0.00 100.00 0 100.00 173 0.60 1898 0.55 100.00 0.00 0.00 0.00 1931 0 0 100.00 100.00

TOTAL RAW PARTICLES.... 29418/35817-- 82.13% NUMBER MEAN DIAMETER... 110.35 MICROMETERS S.D.... 177.30 VOLUME MEAN DIAMETER... 326.36 MICROMETERS S.D.... 617.07

109.21

SAUTER MEAN DIAMETER... 797.07 MICROMETERS

6.01E 06

TOTALS

Dvo.1... 492.24 MICROMETERS 0.00 MICROMETERS DN0.1... D_{V0.5}...10 36.06 MICROMETERS D_{NO.5}... 0.00 MICROMETERS Dv0.9...1569.32 MICROMETERS DNO.9... 241.47 MICROMETERS

R.S.... 1.04

30 psi 1.62 gpm

ACCUMULATED

DTG 80/09/01 04:08:00

DFM=2.0--1.5 MHz

UPPLIN						ACC U	IUDALEU
LI-IIT	J(RAd)	7\3DC	232SEC	8 .:	§ VOL.	3 _ 1	3_VOL.
56	977	2.42E 06	0.08	55.72	0.31	55.72	0.91
39	2691	741286	0.15	17.10	1.51	72.82	2.32
122	2871	352562	0.21	8.13	2.19	80.95	4.52
154	2359	314771	0.43	7.25	4.41	38.21	3.93
137	1244	207847	0.54	4.79	5.52	93.01	14.45
219	511	101669	0.44	2.35	4.55	95.35	19.00
252	289	69653	0.47	1.61	4.86	96.95	23.35
284	153	40639	0.41	0.94	4.18	97.90	28.05
318	78	23357	0.34	0.54	3.44	98.43	31.49
351	37	13447	0.26	0.31	2.70	93.74	34.18
332	36	12287	0.31	0.28	3.21	99.03	37.40
414	16	7492	0.25	0.17	2.53	99.20	39.93
447	10	2732	0.11	0.06	1.17	99.26	41.09
479	14	5233	0.27	0.12	2.78	99.33	43.87
512	7	1903	0.12	0.12	1.24	99.43	45.11
545	6	2484	0.19	0.04	1.96	99.49	47.07
578	6	1901	0.18	0.04	1.80	99.53	49.87
	6	2986	0.33	0.07	3.35	99.60	52.23
611 644	9	2646	0.33	0.07	3.50	99.66	55.72
677	3	1118	0.17	0.03	1.72	99.68	57.44
710		1203	0.17	0.03	2.15	99.71	59.59
	6 8		0.59		6.07		65.65
743	8	2958 1742		0.07		99.78	
776	5		0.40	0.04	4.08	99.82	69.74
809	5 1	3290	0.85	80.0	8.76	99.90	73.50
842	3	50	0.01	0.00	0.15	99.99	73.65
875		894	0.30	0.02	3.03	99.92	81.67
903	1	606	0.22	0.01	2.30	99.93	83.97
941		1337	0.55	0.03	5.65	99.96	39.62
974	0	0	0.00	0.00	0.00	99.96	89.62
1007	0	0	0.00	0.00	0.00	99.96	89.52
1040	1	477	0.27	0.01	2.74	99.97	92.36
1073	1	579	0.36	0.01	3.56	99.99	96.02
1106	0	3	0.00	0.00	0.00	99.99	96.92
1139	1	526	0.39	0.01	3.99	100.00	
1172	0	<u> </u>	0.00	0.00	0.00	100.00	100.00
TOTALS		4.34E 06	9.76				
TOTAL 1	RAG PARTI	CLES	11359/165	84 68.	49%		
NUMBER	MEAN DIA	AMETER	81.84 '110	ROMETERS	S.D	79.34	

UPPER

DNO.1... 0.00 MICROMETERS

D_{NO.5}... 0.00 MICROMETERS
D_{10.9}... 166.59 MICROMETERS

VOLUME MEAN DIAMETER... 162.56 MICROMETERS S.D.... 336.29

DVO.1... 160.68 MICROMETERS

DV0.9...1011.03 MICROMETERS

D_{V0.5}... 538.61 MICROMETERS R.S.... 1.44

SAUTER MEAN DIAMETER... 331.27 MICROMETERS

DTG	84/09/26	10:26:00	30	nsi

		סוס נ	34/09/26]	.0:26:00	30 psi		
		DI	M=1.01.	5 MHz	1	.62 gpm	
UPPER LIMIT	3 (RAW)	N/SEC	9m/SEC	1_3	yor.		ULATED
56	3895	3.59E 06	0.12	63.26	0.10	8_N 63.26	. VOL.
89	5198	631834	0.12	11.13	0.10	74.39	0.10
122	3656	364348	0.22	6.42	0.18	80.81	0.38
154	2550	275263	0.38	4.85	0.31	85.66	0.69
187 219	1076 602	134510	0.35 0.35	2.37	0.29	88.02	0.97
252	528	78928 64150	0.35	1.39	0.28 0.36	89.42 90.55	1.26
284	474	53633	0.54	0.94	0.44	91.49	2.06
318	439	42415	0.61	0.75	0.50	92.24	2.55
351 382	412 416	44819 38370	0.88 0.98	0.79	0.72	93.03	3.27
414	379	34384	1.13	0.61	0.80	93.70 94.31	4.07 5.00
447	338	29281	1.22	0.52	1.00	94.82	6.00
479	322	28 4 4 1	1.47	0.50	1.21	95.33	7.21
512 545	244 232	21249 22751	1.35 1.75	0.37	1.11	95.70 96.10	8.31
578	201	20414	1.89	0.36	1.43	96.46	9.75 11.29
611	179	19405	2.13	0.34	1.74	96.80	13.03
6 44 677	148	14409	1.86	0.25	1.52	97.06	14.55
710	135 127	12484 14953	1.88 2.60	0.26	1.54 2.13	97.28 97.54	16.09 18.22
743	114	12140	2.43	0.21	1.99	97.75 97.97	20.21
776	88	12219	2.79	0.22	2.29	97.97	22.50
809 842	78 72	11363 10713	2.95 3.15	0.20 0.19	2.42 2.58	98.17 98.36	24.91 27.49
875	67	8897	2.94	0.16	2.41	98.51	29.90
908	61	6811	2.52	0.12	2.06	98.63	31.96
941 974	51 40	6463 8595	2.67 3.94	0.11 0.15	2.18 3.23	98.75 98.90	34.14 37.37
1007	29	4575	2.32	0.08	1.90	98.98	39.27
1040	33	7518	4.21	0.13	3.45	99.11	42.71
1073 1106	27 23	3880 4738	2.39 3.20	0.07	1.96 2.62	99.18 99.26	44.67
1139	27	6006	4.44	0.11	3.63	99.37	47.29 50.92
1172	16	2669	2.15	0.05	1.76	99.42	52.68
1205 1238	19 11	4700 2162	4.12 2.06	0.08 0.04	3.37 1.69	99.50 99.54	56.06 57.74
1236	13	3019	3.11	0.05	2.55	99.59	60.29
1 30 4	9	2227	2.48	0.04	2.03	99.63	62.33
1337 1370	9 3	2179 2075	2.62	0.04	2.15 2.20	99.67	64.47
1403	6	1309	2.69 1.82	0.02	1.49	99.71 99.73	66.67 68.16
1436	5	1347	2.01	0.02	1.65	99.75	69.31
1469	5 3 2	494	0.79	0.01	0.65	99.76	70.46
1502 1535	7	857 2409	1.47 4.41	0.02	1.20 3.61	99.78 99.82	71.66 75.27
1568	2	1633	3.19	0.03	2.61	99.85	77.88
1601	3	1391	2.89	0.02	2.37	99.87	80.24
1634 1667	2 1	1329	2.94 0.86	0.02 0.01	2.41 0.70	99.90 99.90	82.65 83.35
1700	1	365 1106	2.76	0.01	2.26	99.92	85.61
1733	0	0	0.00	0.00	0.00	99.92	85.61
1766	0	0	0.00	0.00	0.00	99.92	85.61
1799 1832	0 1	0 593	0.00 1.85	0.00 0. 0 1	0.00 1.52	99.92 99.93	85.61 87.13
1365	0	0	0.00	0.00	0.00	99.93	87.13
1898	0	0	0.00	0.00	0.00	99.93	87.13
1931 1964	0	0	0.00	0.00	0.00	99.93 99.93	87.13 87.13
1997	1	3873	15.72	0.07	12.87	100.00	100.00
20 30	ō	0	0.00	0.00	0.00	100.00	100.00
TOTALS		5.68E 06	122.15				

TOTAL RAW PARTICLES... 22380/27994-- 79.95%

NUMBER MEAN DIAMETER... 111.12 MICROMETERS S.D... 185.42

VOLUME MEAN DIAMETER... 345.23 MICROMETERS S.D... 678.76

SAUTER MEAN DIAMETER... 880.51 MICROMETERS

DNO.1... 0.00 MICROMETERS DV0.1... 549.90 MICROMETERS
DNO.5... 0.00 MICROMETERS DV0.5...1130.12 MICROMETERS
DNO.9... 236.52 MICROMETERS DV0.9...1970.87 MICROMETERS

R.S.... 1.26

D8 Jet,45 Degrees,50 mph,Garlon

DTG 84/09/17 13:38:00

30 psi 1.62 gpm

DFM=2.0--1.5 MHz

UPPER						ACCU	MULATED
LIMIT	M(RAW)	N/SEC	<u>qm/sec</u>	1 N	VOL.	<u>8 N</u>	NOL.
56	1359	3.59E 06	0.12	52.63	0.52	52.63	0.52
89	3182	1.16E 06	0.23	17.04	1.02	69.68	1.54
122	3358	519315	0.32	7.62	1.39	77.30	2.93
154	2784	438365	0.60	6.43	2.64	83.73	5.57
187	1821	306346	0.79	4.49	3.50	88.22	9.06
219	1131	204309	0.89	3.00	3.94	91.22	13.00
252	735	144625	0.99	2.12	4.34	93.34	17.34
284	535	120021	1.21	1.76	5.31	95.10	22.65
318	334	80033	1.15	1.17	5.07	96.27	27.72
351	197	53388	1.04	0.78	4.60	97.06	32.32
382	140	42863	1.09	0.63	4.82	97.69	37.15
414	91	32 35 9	1.07	0.47	4.69	98.16	41.84
447	62	25184	1.05	0.37	4.62	98.53	46.47
479	46	20992	1.09	0.31	4.80	98.84	51.26
512	48	17691	1.12	0.26	4.95	99.10	56.22
545	27	14118	1.09	0.21	4.79	99.30	61.00
5 7 8	22	11218	1.04	0.16	4.56	99.47	65.57
611	10	6873	0.75	0.10	3.32	99.57	68.89
644	12	8635	1.11	0.13	4.90	99.70	73.79
677	10	4865	0.73	0.07	3.22	99.77	77.02
710	7	6207	1.08	0.09	4.76	99.86	81.78
743	5	2967	0.59	0.04	2.62	99.90	84.39
776	2	1817	0.42	0.03	1.83	99.93	86.22
809	2.	651	0.17	0.01	0.75	99.94	86.97
842	0	0	0.00	0.00	0.00	99.94	86.97
875	0	0	0.00	0.00	0.00	99.94	86.97
908	1	622	0.23	0.01	1:01	99.95	87.98
941	0	0	0.00	0.00	0.00	99.95	87.98
974	0	0	0.00	0.00	0.00	99.95	87.98
1007	0	0	0.00	0.00	0.00	99.95	87.98
1040	0	0	0.00	0.00	0.00	99.95	87.98
1073	0	0	0.00	0.00	0.00	99.95	87.98
1106	0	0	0.00	0.00	0.00	99.95	87.98
1139	1	1639	1.21	0.02	5.33	99.97	93.32
1172 1205	1	1882	1.52	0.03	6.68	100.00	100.00
	U	0	0.00	0.00	0.00	100.00	100.00
TOTALS		6.82E 06	22.70				

TOTAL RAW PARTICLES.... 15923/21174-- 75.20%

NUMBER MEAN DIAMETER... 94.02 MICROMETERS S.D.... 96.58

VOLUME MEAN DIAMETER... 185.34 MICROMETERS S.D.... 349.27

SAUTER MEAN DIAMETER... 350.42 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 194.79 MICROMETERS D_{V0.5}... 471.14 MICROMETERS R.S.... 1.96 D_{V0.9}... 206.54 MICROMETERS D_{V0.9}... 1117.98 MICROMETERS

DTG 84/09/26 12:47:00 30 psi 1.62 gpm

DFM=1.0--1.5 MHz

UPPER ACCUMULATED LIMIT N(RAW) N/SEC 9m/SEC & N & VOL. % N % VOL. 2946 2.01E 06 0.07 60.95 0.08 4013 351015 0.07 10.62 0.08 3240 238403 0.14 7.21 0.17 56 60.95 0.08 89 71.58 0.16 122 78.79 0.34 154 2300 178989 0.24 5.42 0.30 84.20 0.63 2.85 1.63 1.16 0.24 187 1072 94228 0.24 0.24 0.26 0.29 87.05 0.93 53895 219 626 0.28 38.69 1.21 38243 252 451 0.31 89.84 1.53 28641 30020 380 284 0.29 0.87 0.35 90.71 1.87 318 416 0.43 0.91 0.52 91.62 2.39 30 0 2 0 0 . 4 3 27 5 4 6 0 . 5 4 24 1 9 0 0 . 6 2 23 6 2 0 0 . 7 8 16 9 6 0 0 . 7 1 13 6 1 8 0 . 7 1 351 374 0.83 0.65 92.45 3.05 382 386 0.73 0.75 93.18 3.79 23620 0.78
16960 0.71
13618 0.71
13021 0.83
14030 1.08
12263 1.13
11958 1.31
10781 1.39
9450 1.42
10485 1.82
8612 1.72
6886 1.57
6184 1.61
5699 1.67
3453 1.14 414 342 0.71 0.94 93.90 4.73 279 94.41 447 0.51 0.85 5.58 479 241 0.41 0.85 94.82 6.43 512 203 0.39 1.00 95.22 7.43 545 203 0.42 8.73 1.30 95.64 187 578 0.37 1.37 96.01 10.10 178 96.37 611 0.36 1.58 11.68 151 0.33 644 96.70 1.68 13.36 677 118 0.29 1.71 96.99 15.07 129 710 0.32 2.20 97.30 17.28 743 99 0.26 2.08 97.56 19.35 776 8**7** 0.21 1.90 97.77 21.25 8 2 6 7

 8 2
 6184
 1.61

 67
 5699
 1.67

 36
 3453
 1.14

 41
 3664
 1.36

 45
 3731
 1.54

 48
 5653
 2.59

 29
 2890
 1.47

 27
 2715
 1.52

 25
 2988
 1.84

 21
 2375
 1.60

 21
 3066
 2.26

 28
 3840
 3.09

 14
 1897
 1.66

 20
 4423
 4.21

 7
 1365
 1.41

 7
 1086
 1.21

 1
 1609
 1.94

 9
 2442
 3.16

 6
 1711
 2.38

 4
 1607
 2.57

 4
 1785
 3.06

 6
 1608
 2.94

 3
 318
 0.62

 5
 1853
 3.85

 1
 982
 2.31

 3
 631
 1.57

 0
 0.00 0.19 1.94 809 97.96 23.19 2.02 98.13 842 25.21 0.10 0.11 0.11 36 875 1.38 99.24 26.59 1.64 908 98.35 28.22 941 1.86 98.46 30.08 974 0.17 3.13 98.63 33.21 0.09 1.77 1007 98.72 34.98 1040 98.80 1.83 36.81 0.09 0.07 0.09 1073 2.22 98.89 39.03 1106 1.94 93.96 40.97 2.73 99.06 43.70 1139 1172 0.12 3.73 99.17 47.43 0.06 1205 2.01 99.23 49.44 5.08 99.36 1238 54.52 1271 0.04 1.70 99.40 56.22 0.03 1304 1.46 99.44 57.68 99.49 60.01 1337 2.33 1370 0.07 99.56 63.83 3.82 0.05 2.87 1403 99.61 66.70 1436 1.57 99.64 68.28 0.05 99.69 71.38 1469 3.10 0.05 1502 3.69 99.74 75.07 99.79 1535 3.55 78.62 0.01 1568 99.80 79.37 0.75 0.06 0.04 0.03 99.85 84.02 1601 4.65 1634 3.09 99.89 87.10 99.92 89.89 2.78 1667 0.02 1.90 99.94 91.79 1700 99.94 91.79 1733 0.00 0.00 0.00 99.94 91.79 1766 0.00 0.00 99.94 91.79 1799 99.94 91.79 1832 0.00 0.00 1527 5.04 0.05 6.08 99.98 97.87 1865 3 2.13 100.00 100.00 1.77 0.02 1898 508

TOTAL RAW PARTICLES.... 19002/23265-- 81.68%

0 3.31E 06

NUMBER MEAN DIAMETER... 118.46 MICROMETERS S.D.... 197.24

0.00

82.89

0.00

VOLUME MEAN DIAMETER... 363.30 MICROMETERS S.D.... 684.70

SAUTER MEAN DIAMETER... 905.79 MICROMETERS

DN0.1... D_{N0.5}... 0.00 MICROMETERS D_{V0.5}...1208.14 MICROMETERS R.S.... 0.91 DNO.9... 257.79 MICROMETERS DVO.9...1668.45 MICROMETERS

1931

TOTALS

0.00 MICROMETERS DV0.1... 575.06 MICROMETERS

0.00

100.00

100.00

DTG 84/09/18 15:08:00

30 psi 1.62 gpm

DFM=2.0--1.5 MHz

UPPER						ACCU	MULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	8 N	% VOL.	<u> </u>	%_VOL.
56	1053	5.03E 06	0.17	56.06	0.72	56.06	0.72
89	2657	1.54E 06	0.31	17.19	1.32	73.25	2.04
122	2823	702136	0.43	7.82	1.84	81.07	3.88
154	2444	678159	0.93	7.56	4.01	88.63	7.89
187	1311	350273	0.91	3.90	3.92	92.53	11.81
219	744	219864	0.96	2.45	4.15	94.98	15.97
252	385	122052	0.83	1.36	3.59	96.34	19.56
284	237	86333	0.87	0.96	3.75	97.31	23.31
318	128	51815	0.74	0.58	3.73	97.88	26.53
351	95	46320	0.91	0.52	3.92	98.40	30.45
			0.70	0.32	3.92		33.46
382	59	27282	0.66		2.84	98.70	
414	38	19990		0.22		98.93	36.30
447	32	13045	0.54	0.15	2.35	99.07	38.65
479	24	14686	0.76	0.16	3.29	99.24	41.94
512	18	8263	0.53	0.09	2.27	99.33	44.21
545	23	8684	0.67	0.10	2.89	99.43	47.10
578	18	5420	0.50	0.06	2.16	99.49	49.27
611	16	5337	0.58	0.06	2.53	99.54	51.79
644	13	4740	0.61	0.05	2.64	99.60	54.44
677	19	5735	0.86	0.06	3.73	99.66	58.16
710	25	5275	0.92	0.06	3.97	99.72	62.13
743	9	1478	0.30	0.02	1.28	99.74	63.41
776	8	3991	0.91	0.04	3.94	99.78	67.35
809	16	6926	1.80	800	7.78	99.86	75.13
842	7	2073	0.61	0.02	2.63	99.88	77.76
875	7	2576	0.85	0.03	3.68	99.91	81.44
908	4	606	0.22	0.01	0.97	99.92	82.41
941	5	2998	1.24	0.03	5.35	99.95	87.76
974	3	786	0.36	0.01	1.56	99.96	89.32
1007	3	840	0.43	0.01	1.84	99.97	91.16
1040	1	1183	0.66	0.01	2.86	99.98	94.02
1073	1	645	0.40	0.01	1.72	99.99	95.74
1106	0	0	0.00	0.00	0.00	99.99	95.74
1139	0	0	0.00	0.00	0.00	99.99	95.74
1172	0	0	0.00	0.00	0.00	99.99	95.74
1205	1	159	0.14	0.00	0.60	99.99	96.34
1238	1	692	0.66	0.01	2.85	100.00	99.19
1271	0	0	0.00	0.00	0.00	100.00	99.19
1304	0	0	0.00	0.00	0.00	100.00	99.19
1337	Ö	Ö	0.00	0.00	0.00	100.00	99.19
1370	Ö	Ŏ	0.00	0.00	0.00	100.00	99.19
1403	Ö	Ö	0.00	0.00	0.00	100.00	99.19
1436	ĭ	125	0.19	0.00	0.81	100.00	100.00
1469	ō	0	0.00	0.00	0.00	100.00	100.00
	•			0.00	0.00	20000	20000
TOTALS		8.97E 06	23.14				

TOTAL RAW PARTICLES.... 12229/17591-- 69.52%

NUMBER MEAN DIAMETER... 82.85 MICROMETERS S.D.... 83.96

VOLUME MEAN DIAMETER... 170.19 MICROMETERS S.D.... 349.48

SAUTER MEAN DIAMETER... 354.35 MICROMETERS

D_{NO.1}... 0.00 MICROMETERS D_{VO.1}... 172.02 MICROMETERS

D_{NO.5}... 0.00 MICROMETERS D_{VO.5}... 587.08 MICROMETERS R.S.... 1.39

D_{N0.9}... 165.85 MICROMETERS D_{V0.9}... 985.76 MICROMETERS

			D8 JET,	0 DEGI	REES,	40 PSI,	50 MPH	, 1./
DTG 84/02/10 14:47:00	UPPER						ACCIIM	ULATED
DFM=1.01.5 MHz	LIMI1	N (RAW)	MISEC	qm/SEC	N.N	you.	# W	3 VOL.
	56	2982	1.00E 06	U.03	56.62	0.08	56.62	0.08
	89	4999	218712	0.04	12.37	9.10	68.98	0.18
	122 154	46 0 2 3 3 9 0	168239 122494	0.10 0.17	9.51 6.93	0.25 0.40	78.50 85.43	0.43 0.83
	187	1659	62806	0.16	3.55	0.39	88.98	1.22
	219	914	3 30 5 8	0.14	1.87	J. 35	90.85	1.57
	252	6 0 6	20 56 4	0.14	1.16	0.34	92.01	1.91
	284 318	482 410	15721 11044	0.16 0.16	0.89 0.62	0.38 0.38	92.90 93.52	2.29 2.67
	351	359	9439	0.18	0.53	0.44	94.06	3.11
	382	341	8751	0.22 0.19	0.49	0.54	94.55	3.65
	414 447	249 263	5760 6795	0.19	0.33	0.46 0.68	94.88 95.26	4.11 4.79
	479	222	56 48	0.29	0.32	0.70	95.58	5.49
	512	227	5824	0.37	0.33	0.89	95.91	6.38
	545	221	5818	0.45	0.33	1.08	96.24	7.46
	578 611	174 165	5235 4460	0.48	0.30	1.16	96.54 96.79	8.62 9.80
	644	151	4373	0.56	0.25	1.36	97.04	11.15
	677	155	4539	0.68	0.26	1.64	97.29	12.80
	710 743	116 102	3361 3374	0.58	0.19	1.41	97.48	14.20
	776	93	326 5	0.68	0.19	1.80	97.67 97.86	15.83 17.62
	809	91	2803	0.73	0.16	1.75	98.02 98.22	19.37
	842	101	3514	1.03	0.20	2.48	98.22	21.86
	875 908	5 9 6 5	2148 2625	0.71	0.12 0.15	1.71 2.34	98.34 98.49	23.56 25.90
	941	46	1922	0.97 0.79	0.11	1.91	98.59	27.80
	974	54	226 1	1.04	0.13	2.49	98.72	30.30
	1007	48	1911	0.97	0.11	2.33	98.83	32.63
	1040 1073	34 42	1617 2033	0.91 1.25	0.09	2.18 3.01	98.92 99.04	34.81 37.82
	1106	25	1012	5.68	0.06	1.64	99.09	39.46
	1139	26	1250	0.92	0.07	2.22	99.16	41.68
	1172 1205	15 21	1105 1019	0.89 0.89	0.06 0.06	2.14	99.23 99.28	43.82 45.97
	1238	30	1484	1.41	0.08	3.40	99.20	49.37
	1271	15	918	0.95	0.05	2.28	99.42	51.65
	1304	12	1098	1.22	0.06	2.94	99.48	54.59
	1337 1370	8 11	879 698	1.06 0.90	0.05	2.54 2.17	99.53 99.57	57.13 59.31
	1403	10	764	1.06	0.04	2.56	99.61	61.86
	1436	9	631	0.94	0.04	2.27	99.65	64.13
	1469	10	697	1.12	0.04	2.68	99.69	66.82
	1502 1535	8 7	409 680	0.70 1.24	0.02	2.99	99.61 99.65 99.67 99.77 99.75 99.80 99.84 99.85 99.85 99.91	68.50 71.50
	1568	2	680 212	0.41	0.01	1.00	99.76	72.49
	1601	3	694	1.44	0.04	3.47	99.80	75.96
	16 34	2	631	1.39	0.04	3.35	99.84	79.31
	1667 1700	1 0	187	0.00	0.01	1.06	99.85	80.37 80.37
	1733	6	1117	2.95	0.06	7.10	99.91	87.47
	1766	0	0	0.00	0.00	0.00	99.91	87.4
	1799	2	203	0.60	0.01	1.45	99.92	88.92
	1832 1865	2	738 330	2.31 1.09	0.04	5.55 2.62	99.97 99.98	94.47 97.08
	1898	U	0	0.00	0.00	0.00	99.98	97.08
	1931	0	0	0.00	0.00	0.00	99.98	97.08
	1964	0	0	0.00	0.00	0.00	99.98	97.08
	1997 2030	0	0 284	0.00 1.21	0.00	0.00 2.92	99.98	97.08 100.00
	2063	ō	0	0.00	0.00	0.00	100.00	100.00
	TOTAL C		1 775 06	41 60				

TOTAL RAW PARTICLES 23650/26032-- 90.85%

1.77E 06

NUMBER MEAN DIAMETER... 113.84 MICROMETERS S.D.... 187.79

41.58

S.D.... 693.66 VOLUME MEAN DIAMETER... 355.59 MICROMETERS

SAUTER MEAN DIAMETER... 932.30 MICROMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0...}...$ 615.41 MICROMETERS $D_{V0.5}...$ 1246.54 MICROMETERS

 $D_{N0.9}...$ 204.99 MICROMETERS $D_{V0.9}...1804.95$ MICROMETERS R.S. = 0.95

Reference #4

DTG 84/02/10 11:19:00

DPM=1.0--3.0 MHz

UPPER	****	11 /0.00	(0.00				ULATED
LIMIT	MIRAW,	MISEC	gm/SEC	₫ Ñ	1 VOL.	₹ Ñ	N VOL.
56	1709	2.67E 06	0.09	47.84	0.08	47.84	0.08
89	3159	641103	0.13	11.48	0.11	59.32	0.19
122	3211	507396	0.31	9.09	0.27	68.40	0.46
154	2710	446649	0.61	8.00	0.54	76.40	1.00
187	1701	26 3 2 5 2	0.68	4.71	0.60	81.12	1.60
213	1198	180876	0.79	3.24	0.70	84.36	2.30
252	935	143386	0.98	2.57	0.86	86.93	3.17
284	715	97057	0.97	1.74	0.86	88.66	4.03
318	6 2 5	85147	1.22	1.52	1.08	90.19	5.11
351	482	62329	1.22	1.12	1.08	91.30	6.19
382	390	59096	1.51	1.06	1.33	92.36	7.52
414	315	42439	1.40	0.76	1.23	93.12	8.75
447	279	38115	1.59	0.68	1.40	93.81	10.16
479	232	34929	1.81	0.63	1.60	94.43	11.76
512	218	29025	1.84	0.52	1.63	94.95	13.39
545	180	21912	1.69	0.39	1.49	95.34	14.88
578	186	26 374	2.44	0.47	2.15	95.82	17.03
611	160	23854	2.61	0.43	2.31	96.24	19.34
644	143	26 1 7 2	3.37	0.47	2.98	96.71	22.32
67 7	128	16839	2.53	0.30	2.24	97.01	24.56
710	89	18437	3.21	0.33	2.84	97.34	27.39
743	74	15427	3.09	0.28	2.73	97.62	30.12
776	92	15546	3.56	0.28	3.14	97.90	33.26
809	62	11933	3.10	0.21	2.74	98.11	36.00
842	48	6401	1.88	0.11	1.66	98.23	37.66
875	55	12048	3.98	0.22	3.52	98.44	41.18
908	43	11152	4.13	0.20	3.65	98.64	44.83
941	40	9256	3.82	0.17	3.37	98.81	48.20
974	28	8013	3.67	0.14	3.25 2.34	98.95	51.45
1007	21 21	5208 8920	2.64 4.99	0.09	4.41	99.04 99.20	53.78 58.19
1040	18		3.59	0.10	3.17	99.20	61.37
1073 1106	12	5834 3804	2.57	0.10	2.27	99.38	63.64
1139	5	6 2 2	0.46	0.01	0.41	99.39	64.04
1172	9	4616	3.72	0.08	3.29	99.47	67.33
1205	9	2774	2.43	0.05	2.15	99.52	69.48
1238	3	4696	4.47	0.08	3.95	99.60	73.43
1271	5	8382	8.65	0.15	7.64	99.75	81.07
1304	2	2411	2.69	0.04	2.37	99.80	83.44
1337	3	1287	1.55	0.02	1.37	99.82	84.81
1370	2	2867	3.71	0.05	3.28	99.87	88.09
1403	2	2500	3.48	0.04	3.08	99.92	91.17
1436	ō	2500	0.00	0.00	0.00	99.92	91.17
1469	ĭ	170	0.27	0.00	0.24	99.62	91.41
1502	2	234	0.40	0.00	0.35	99.92	91.76
1535	ō	0	0.00	0.00	0.00	99.92	91.76
1568	Ŏ	ŏ	0.00	0.00	0.00	99.92	91.76
1601	0	0	0.00	0.00	0.00	99.92	91.76
16 34	1	4216	9.32	0.08	8.24	100.00	100.00

D8 JET BACK, 100 MPH, 40 PSI

DTG 84/02/10 11:19:00

DFM=1.0--3.0 MHz

UPPER						ACCUI	MULATED
LIMIT	M (RAW)	MYZEC	qm/SEC	N N	N VOL.	3_N	VOL.
1667	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		5.58E 06	113.18				

TOTAL RAW PARTICLES.... 19323/23260-- 83.07%

NUMBER MEAN DIAMETER... 137.11 MICROMETERS S.D.... 186.19

VOLUME MEAN DIAMETER... 338.41 MICROMETERS S.D.... 601.06

SAUTER MEAN DIAMETER... 724.87 MICROMETERS

DNO.1... 0.00 MICROMETERS DVO.1.. 443.60 MICROMETERS DVO.5... 62.48 MICROMETERS DVO.5.. 958.80 MICROMETERS R.S... 0.99 DNO.9... 313.21 MICROMETERS DVO.9. .1389.97 MICROMETERS

D8 JET, 90 DEGREES, 40 PSI, 100 MPH, 1.7 GPM, WATER

DTG 84/02/15 14:58:00

DFM=1.0--3.0 MHz

UPPER						A CCU!	MULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	3 1	% VOL.	<u>8 </u>	₹ VOL.
56	2472	1.48E 07	0.49	52.74	1.02	52.74	1.02
89	3317	4.57ย บร	0.91	16.31	1.90	69.04	2.92
122	2159	3.198 06	1.94	11.40	4.06	30.45	6.98
154	1347	1.98E 06	2.71	7.08	5.68	87.53	12.66
187	823	1.22C 06	3.16	4.35	5.61	91.38	19.27
219	S 2S	72279 7	3.16	2.53	5.52	94.46	25.88
252	409	399218	2.72	1.42	5.69	95.88	31.58
284	416	332792	3.34	1.19	7.UC	97.07	38.57
318	353	241243	3.47	0.35	7.26	97.93	45.83
351	183	153195	3.00	0.55	6.27	98.48	52.11
382	127	105244	2.69	0.38	5.63	98.85	57.73
414	105	87875	2.89	0.31	6.06	99.17	53.79
447	67	33315	1.41	0.12	2.95	99.29	66.74
479	68	50352	2.61	0.13	5.47	99.47	72.21
512	55	5 26 6 2	3.35	0.19	7.01	99.56	79.21
545	43	34145	2.63	0.12	5.50	99.78	84.72
578	37	33022	3.05	0.12	6.38	99.89	91.10
611	24	9402	1.03	0.03	2.16	99.93	93.26
644	9	5363	0.69	0.02	1.45	99.95	94.70
677	10	7 26 4	1.09	0.03	2.29	99.97	96.99
710	9	3583	0.62	0.01	1.31	99.99	98.30
743	2	2044	0.41	0.01	0.86	99.99	99.15
776	3	1771	0.40	0.01	0.85	100.00	100.00
809	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		2.80E 07	47.77				

TOTAL RAW PARTICLES.... 12669/17904-- 70.76%

NUMBER MEAN DIAMETER... 85.02 MICROMETERS S.D.... 75.16

VOLUME MEAN DIAMETER... 148.28 MICROMETERS S.D.... 248.63

SAUTER MEAN DIAMETER... 253.15 MICROMETERS

Reference #4

bo decid begrees, 40 bar, 150 mbn, 1.7 gpm, water

DTG 84/02/10 13:59:00

DFM=1.0--4.0 MHz

UPPER LIMIT	N (RAW)	N/SEC	qm/SEC	9- NI	%_VOL.		MULATED		
				<u>₹ N</u>		<u>₹ N</u>			
56	8 95	3.05E 06	0.10	28.90	0.19	28.90	0.19		
89	3432	1.54E 06	0.31	14.58	0.57	43.48	0.76		
122	4044	1.55E 06	0.94	14.67	1.75	58.15	2.51		
154	3184	1.27E 06	1.73	11.98	3.22	70.14	5.73		
187	2514	913276	2.37	a.65	4.41	78.79	10.14		
219	1915	58535 3	2.56	5.54	4.77	84.33	14.91		
252	1388	408730	2.78	3.87	5.19	88.20	20.09		
284	1171	300652	3.02	2.85	5.62	91.05	25.72		
318	920	243432	3.50	2.31	6.52	93.35	32.24		
351	734	155170	3.04	1.47	5 .6 5	94.82	37.89		
382	538	128500	3.28	1.22	6.11	96.04	44.00		
414	420	104376	3.44	0.99	6.40	97.02	50.40		
447	296	76259	3.18	0.72	5.92	97.75	56.32		
479	202	61905	3.21	0.59	5.98	98.33	62.30		
512	145	599 5 9	3.81	0.57	7.10	98.90	69.40		
5 4 5	91	34125	2.63	0.32	4.89	99.22	74.29		
578	66	16 318	1.51	0.15	2.81	99.38	77.10		
611	30	16328	1.79	0.15	3.33	99.53	80.43		
644	22	10273	1.32	0.10	2.47	99.63	82.90		
6 7 7	15	10000	1.50	0.09	2.80	99.72	85.70		
710	4	3962	0.69	0.04	1.28	99.76	86.99		
743	2	1400	0.28	0.01	0.52	99.78	87.51		
776	9	12831	2.93	0.12	5.47	99.90	92.97		
809	3	1188	0.31	0.01	0.57	99.91	93.55		
842	1	8072	2.37	0.08	4.42	99.98	97.96		
875	0	0	0.00	0.00	0.00	99.98	97.96		
908	0	0	0.00	0.00	0.00	99.98	97.96		
941	O	U	0.00	0.00	0.00	99.98	97.96		
974	0	0	0.00	0.00	0.00	99.98	97.96		
1007	0	0	0.00	0.00	0.00	99.98	97.96		
1040	0	0	0.00	0.00	0.00	99.98	97.96		
1073	0	0	0.00	0.00	0.00	99.98	97.96		
1106	1	1619	1.09	0.02	2.04	100.00	100.00		
1139	0	0	0.00	0.00	0.00	100.00	100.00		
TOTALS		1.06E 07	53.69						
ጥጋጥል፣ ይ	AW DADENT	CIEC	22042/2605	6 04	.00				
TOTAL RAW PARTICLES 22042/26056 84.59%									
NUMBER	MEAN DIA	METER 13	32.48 MIC	ROMETERS	S.D	109.15			

```
      VOLUME MEAN DIAMETER... 213.41 MICROMETERS
      S.D... 333.03

      SAUTER MEAN DIAMETER... 329.88 MICROMETERS

      DNO.1... 0.00 MICROMETERS
      DV0.1... 186.23 MICROMETERS

      DNO.5... 103.60 MICROMETERS
      DV0.5... 412.90 MICROMETERS

      DNO.9... 272.67 MICROMETERS
      DV0.9... 757.55 MICROMETERS
```

D8 JET, 90 DEGREES, 40 PSI, 150 MPH, 1.7 GPM, WATER

DTG 84/02/15 15:08:00

DFM=1.0--4.0 MHz

UPPER						A CC U	CETALUN
LIMIT	N(RAW)	NZSEC	qm/SEC	<u>8 - 71</u>	%_VOL.	₹	\$ AOF.
56	598	1.750 07	0.57	56.68	2.21	56.68	2.21
89	853	4.74E 06	0.94	15.39	3.62	72.07	5.83
122	677	3.00E 06	1.82	9.73	7.00	81.80	12.82
154	560	2.17E 06	2.96	7.04	11.39	88.84	24.21
187	442	1.43E 06	3.71	4.66	14.27	93.50	38.48
219	303	855847	3.74	2.78	14.38	96.28	52.86
252	266	656685	4.47	2.13	17.19	98.41	70.06
284	85	288137	2.89	0.94	11.12	99.35	81.18
318	35	74418	1.07	0.24	4.11	99.59	85.29
351	15	39299	0.77	0.13	2.96	99.72	88.25
382	11	34938	0.89	0.11	3.43	99.83	91.68
414	4	15438	0.51	0.05	1.95	99.88	93.63
447	3	31363	1.31	0.10	5.02	99.98	98.65
479	2	3951	0.20	0.01	0.79	99.99	99.44
512	1	221	0.01	0.00	0.05	99.99	99.49
545	3	1494	0.12	0.00	0.44	100.00	99.94
578	1	177	0.02	0.00	0.05	100.00	100.00
611	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		3.08E 07	26.02				

TOTAL RAW PARTICLES.... 3859/ 5970-- 64.64%

NUMBER MEAN DIAMETER... 77.02 MICROMETERS S.D.... 57.97

VOLUME MEAN DIAMETER... 117.34 MICROMETERS S.D.... 171.62

SAUTER MEAN DIAMETER... 173.90 MICROMETERS

 $D_{N\,0.1}\dots$ 0.00 MICROMETERS $D_{V\,0.1}\dots$ 108.63 MICROMETERS $D_{V\,0.5}\dots$ 213.37 MICROMETERS

DNO.9... 162.49 MICROMETERS DVO.9... 367.81 MICROMETERS R.S.... 1.21

Reference #4

Nozzle	D10-45	Slice Rate	1.5 MHz
Angle to Airstream	O degrees	AVG	100
Spray Pressure	30 psi	OFM	1 cm.
Airspeed	50 mph	BAR	1.5
Flow Rate	.94 gpm	Distance to Probe	31 cm.
Tank Mix	10% SIM. AATREX	Sample Interval	300 sec.
	90% WATER	Number of Samples	1
		Number of Scans	8
FILE: C:\PMS\OATA\C	73186.004	Scan Spacing	5 cm.
Number of Tests Com	bined: 2	Scan Length	40 cm.

FILE: C:\PMS\OATA\073186.004 Number of Tests Combined: 2

UP	PER						ACCU	MULATED
LI	MIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.
	56	4103	1.42E+07	0.47	52.30	0.42	52.30	0.42
	89	6484	3.37E+06	0.67	12.36	0.60	64.66	1.03
1	22	6904	2.89E+06	1.75	10.60	1.58		2.61
1	54	4610					82.09	
1	87	2525		2.67	3.79		85.88	7.33
2	20	1678	801251	3.51	2.94	3.17	88.83	10.50
2	52	1098	583413	3.98	2.14		90.97	14.10
2	84	812	499312		1.83	4.53	92.80	18.63
3	18	597	396318	5.70	1.46	5.15	94.26	23.78
3	51	477				5.53	95.41	29.32
3	82		253954	6.49	0.93	5.86	96.34	
4	14	308	214642	7.07	0.79	6.39	97.13	41.57
4	47	253	158809	6.62	0.58	5.98	97.71	47.55
4	.79	227	144596	7.50	0.53	6.78	98.24	54.33
5	12	182	108006	6.86	0.40	6.21	98.64	60.53
5	45	166	102109	7.86	0.37	7.11	99.01	67.64
5	78	144	81682	7.54	0.30	6.82	99.31	74.46
6	11	100	55297	6.06	0.20	5.48	99.52	79.94
6	44	61	34938	4.50		4.07		84.01
	77	43	40953			5.57		
	10	32	16786	2.92	0.06	2.64	99.86	
	43	27	21702		0.08			
	76	20	12489	2.86	0.05		99.98	
	309	2	680		0.00		99.99	
	342	4	2357			0.63	99.99	
ε	375	3	1623	0.54	0.01	0.48	100.00	100.00
TC	TAL	3.13E+04	2.72E+07	110.61				

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 31260/ 40841 = 76.5%

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NUMBER MEAN DIA.= D10.... 102.57 \mum VOLUME MEAN DIA.= D30.... 198.03 \mum SAUTER MEAN DIA.= D32.... 352.73 \mum
VOLUME MEDIAN DIA.=DV.1... 458.73 µm
DV.9... 681.76 µm
RELATIVE SPAN= 1.02
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Reference #5

Spray Airspe Flow R	to Airstream Pressure ed			AVG DFM BAR Dist C Samp Numb	ance to Pole Interview of Sam	1 c 1.9 Probe 31 Val 300 pples 1	100 1 cm.		
	C:\PMS\DATA\ of Tests Co	080186.005		Scar	er of Sca Spacing Length	5 c	cm.		
UPPER LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	ACCUI	MULATED % VOL.		
56 89 124 187 2252 284 351 2252 318 4147 4712 54447 7113 6477 747 8475 8475 8477 8474	8152 5518 3879 2752 1838 1357 1109 840 591 457 383 276 221 156 91 81 53 26 19 12	1.84E+07 5.47E+06 5.06E+06 2.60E+06 1.28E+06 847322 6479191 556295 448722 5454663 483251 413716 308754 3436754 3436754 3437728 41387 33145 24576 13314 80434 5542 1763 1226	1.09 3.07 3.56 3.71 4.63 5.59 6.45 10.67 11.55 20.14 21.45 22.46 11.96 2.37 2.32 16.127 0.00 0.01	14.15 13.05 6.71 3.29 2.19 1.75 1.43 1.16 1.41 1.25 1.07 0.80 0.89 0.31 0.09 0.03 0.21 0.00 0.00	1.62 1.82 2.75 7.77 5.68 7.90 10.65 13.09 1.82 1.182 1.182 1.182 1.182 1.180 0.100	61.74 74.79 81.50 84.79 86.77 98.72 90.16 91.32 92.72 93.89 95.15 96.39 97.46 97.46 97.48 97.48 97.49 97.77 97.78 97.77	0.83 2.34 4.09 5.72 7.54 9.81 12.56 15.73 20.98 26.63 44.63 44.63 44.63 64.63 64.63 64.63 87.63 87.63 87.63 87.63 87.63 87.75 87.75 99.75 99.75		
	5.36E+04 ACCEPTED RAU			IMAGES :	= 53560/	70457 =	76.0%		
VOLUME	MEAN DIA. = MEAN DIA. = MEAN DIA. =	D ₃₀ 2	15.68 um						
NUMBER	MEDIAN DIA	D _{N.1} ···· □ _{N.5} ···· □ _{N.9} ···· 2	<56 µm 61.90 µm 81.14 µm						
VOLUME	MEDIAN DIA	DV.1 2 -DV.5 4 DV.9 6	54.03 µm 64.22 µm 86.09 µm						
	RELATIVE SPAN= 0.93								

Slice Rate 1.5 MHz

D10-45

Nozzle

Nozzle Angle to Airstream Spray Pressure Airspeed Flow Rate Tank Mix	D10-45 D degrees 3D psi 5D mph .94 9pm 10% SIM. VELPAR 90% WATER	Slice Rate AVG DFM BAR Distance to Probe Sample Interval Number of Samples Number of Scans	300 sec.
FILE: C:\PMS\DATA\D		Scan Spacing	5 cm.
Number of Tests Com		Scan Length	40 cm.

FILE: C:\PMS\DATA\073186.001 Number of Tests Combined: 2

UPPER						ACCU	MULATED
LIMIT	N(RAW)	N/SEC	Gm/SEC	7. N	% VOL.	% N	% VOL.
56	4303	2.32E+07	0.76	52.22	0.68	52.22	0.68
89	7170	6.06E+06	1.20	13.63	1.08	65.86	1.76
122	6726	5.02E+06	3.05	11.28	2.72	77.14	4.48
154	4692	3.39E+06	4.65	7.64	4.15	84.78	8.64
187	2730	1.89E+06	4.88	4.25	4.37		
220	1839	1.23E+06	5.39	2.77	4.82	91.79	17.82
252	1285	823666	5.61	1.85	5.02	93.65	22.84
284	1029	642736	6.46	1.45	5.77	95.09	28.62
318	925	552496	7.94	1.24	7.10	96.33	35.72
351	764	431720	8.44	0.97	7.55	97.31	43.27
382	643	360570	9.21	0.81	8.24	98.12	51.51
414	452	217742	7.17	0.49	6.41	98.61	57.92
447	357	174028	7.25	0.39	6.49	99.00	64.41
479	272	114986	5.96	0.26	5.33		69.74
512	221	99370	6.31	0.22	5.65		
545	166	68528	5.28	0.15	4.72	99.63	
578	109		4.63	0.11	4.14	99.75	
611	76	36118	3.96	0.08			
644	55	28694	3.70	0.06	3.31		
677	31	16333	2.46	0.04	2.20		93.29
710	23	10850	1.89	0.02	1.69	99.95	94.98
743	13	7507	1.50	0.02	1.34	99.97	96.32
776	6	1990	0.45	0.00	0.41	99.98	96.73
809	4	3757		0.01	0.87		97.60
842	4	3278		0.01	0.86	99.99	98.47
875	1	473	0.16	0.00	0.14		98.60
908	0	0	0.00	0.00	0.00		98.60
941	0 0 2	0	0.00	0.00	0.00		98.60
974	2	3403	1.56	0.01	1.40	100.00	100.00
TOTAL	7-705107-	7-775155-	111-61-				

TOTAL 3.39E+04 4.44E+07 111.81

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TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 33898/ 45732 = 74.1%
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NUMBER MEAN DIA.= D10.... 93.13 µm VOLUME MEAN DIA.= D30.... 168.80 µm SAUTER MEAN DIA.= D32.... 291.87 µm
NUMBER MEDIAN DIA.=D_{N-5}^{D}... (56 µm D_{N-9}^{D}... 178.55 µm
UV.1... 164.58 um
VOLUME MEDIAN DIA.≃DV.5... 377.85 um
DV.9... 632.58 um
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RELATIVE SPAN= 1.24 *

Anele Entare Renaria Maria Mar	to Arrstrea Pressure ed ate ix C:\PMS\DATA cf Tests C	D18-45 m	ees T	DEM BAR Same Numb Scar Scar	ance to ple Interpretation of Sacing Spacing Length	10 1 1. Probe 31 val 30 mpies 1 ans 8 40	Com. Som. Com. Com. Com.
8824752481247925814713475347547537 11122223334445556667777835795514753 A	8245 5271 6747 3681 24604 1160 876 738 618 5435 356 435 71 38 31 40 71 38 31 40 71 38 31 40 71 71 71 71 71 71 71 71 71 71 71 71 71	27740 25616 13864 10399	0.1201467515204204385181139850508 0.12223345576655443822110.1300000	12.47 10	0.477 1.457 2.518 4.426 4.306 7.127 5.918 4.306 7.127 5.97 4.037 3.333 4.037 3.333 4.037 3.333 4.037 3.333 4.037 3.333 4.037 3.333 3.333 4.037 4.037 3.333 4.037 4.037 4.037 4.037 4.037 4.037 4.037 4.037 4.037 4.037 4.037 4.037 4.037 5.037 6.037 6.037 7.037 8.037 8.037 8.037 8.037 8.037 8.037 8.037 8.037 <	72.11 84.25 90.57 91.58 91.58 97.73 97.37	0.95 2.49 7.49 7.48 10.48 120 181 181 181 181 181 181 181 181 181 18
NUMBER VOLUME EAUTER NUMBER VOLUME	MEAN DIA.= MEAN DIA.= MEAN DIA.= MEDIAN DIA	DV.1 25 DV.5 25 DV.5 43	22.09 um 22.09 um 28.60 um 36.28 um 36.29 um 37.29 um	IMAGES =	L:646/	52121 =	79.9%

Nozzle 010 JET
Angle to Airstream 0 degrees
Spray Pressure 30 psi
Airspeed 50 mph
Fiow Rate 2.35 gpm
Tank Mix 10% SIM.AATREX 4L
70% WATER

FILE: C:\PMS\OATA\O80586.007 Number of Tests Combined: 2 Slice Rate 1.5 MHz
AVG 100
OFM 1 cm.
BAR 1.5
Distance to Probe 178 cm.
Sample Interval 300 sec.
Number of Samples 1
Number of Scan 12
Scan Spacing 1.66 cm.
Scan Length 35 cm.

UPPER LIMIT N(RAW) N/SEC Gm/SEC 7. N 7. VOL. 7. N 7. VOL.	Thir N(RAW) N/SEC Gm/SEC 7. N 7. VOL. 7. N 7. VOL.								
89 5307 539263 0.11 10.97 0.09 76.00 0.19 122 4131 358039 0.22 7.28 0.19 83.28 0.38 154 2073 260993 0.36 5.31 0.31 88.59 0.69 167 1288 123745 0.32 2.52 0.28 91.11 0.97 220 693 64468 0.28 1.31 0.25 92.42 1.22 252 441 40304 0.27 0.82 0.24 93.24 1.46 284 335 29477 0.30 0.60 0.26 93.84 1.72 318 293 24290 0.35 0.49 0.31 94.81 2.43 382 209 15434 0.37 0.31 0.35 95.12 2.77 414 217 17446 0.57 0.35 0.50 95.75 3.77 479 167 13248	122		N(RAW)	N/SEC	Gm/SEC	7. N	% VOL.		
89 5307 539263 0.11 10.97 0.09 76.00 0.19 122 4131 358039 0.22 7.28 0.19 83.28 0.38 154 2073 260993 0.36 5.31 0.31 88.59 0.69 167 1288 123745 0.32 2.52 0.28 91.11 0.97 220 693 64468 0.28 1.31 0.25 92.42 1.22 252 441 40304 0.27 0.82 0.24 93.24 1.46 284 335 29477 0.30 0.60 0.26 93.84 1.72 318 293 24290 0.35 0.49 0.31 94.81 2.43 382 209 15434 0.37 0.31 0.35 95.12 2.77 414 217 17446 0.57 0.35 0.50 95.75 3.77 479 167 13248	122								
1304 14 1770 1.97 0.04 1.73 99.47 49.77 1337 8 847 1.02 0.02 0.89 99.48 50.66 1370 12 2176 2.82 0.04 2.48 99.53 53.14 1403 9 1677 2.34 0.03 2.05 99.56 55.19 1436 13 3059 4.57 0.06 4.01 99.62 59.20 1469 6 1023 1.64 0.02 1.44 99.65 60.64 1502 4 1026 1.76 0.02 1.54 99.67 62.18 1535 7 1357 2.48 0.03 2.18 99.69 64.36 1568 7 2026 3.95 0.04 3.47 99.74 67.84		LIMIT 56 89 122 154 187 220 252 284 318 351 382 414 447 479 512 545 578 611 644 677 710 743 776 809 841 1007 1040 1073 1106 1073 1106 1139 1172 1205 1238 1271 1304 1337 1436 1459 1558	4083 5309 4131 2873 1288 493 441 335 2983 209 217 158 188 150 124 101 101 89 75 40 85 55 40 38 31 21 22 33 18 40 33 18 40 33 18 40 33 18 40 30 40 40 40 40 40 40 40 40 40 40 40 40 40	3.20E+06 539263 358039 260993 1237468 40304 29477 24290 23328 15434 17446 13328 12358 14990 11659 9839 1962 9634 9651 9439 7978 7978 7978 7978 7978 7978 5286 5268 5022 4320 4085 3680 4682 36110 3379 1770 847 2170 2170 2	0.11 0.33287 0.33227 0.35699 0.55699 1.054889 1.68827 1.054589 1.68827 1.054537 1.05	65.03 10.77 7.28 5.31 2.52 1.31 0.49 0.47 0.35 0.27 0.25 0.30 0.24 0.20 0.19 0.16 0.14 0.12 0.11 0.09 0.07 0.07 0.04 0.02 0.02 0.02 0.03 0.04	0.09 0.19 0.25 0.25 0.25 0.25 0.25 0.49 0.49 0.69 1.01 0.49 1.01 1.59 1.46 1.59 1.69 1.69 1.75 2.12 2.12 2.12 2.12 2.13 1.76 1.77 2.16 1.77 2.16 1.77 2.17 2.17 2.17 2.17 2.17 2.17 2.17	N - 3008971.24444412828811465277.3.656.25711244444152788116455.70788.3.444.3128526.5.70788.3.444.33625777.3.688.3.8.7089797979797979797979797979797979797979	% VOL. 0.09 0.19 0.38 0.69 1.46 1.72 2.03 2.77 3.27 4.00 7.97 13.32 17.14 18.97 20.69 12.07 13.73 17.14 18.97 20.69 23.93 24.05 30.41 32.62 30.42 31.42 43.97 50.61 49.77 50.61 49.77 50.61 49.77 50.61 49.77 50.61 64.36

TOTAL 2.23E+04 4.92E+06 113.88

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 22312/ 28683 = 77.8%

NUMBER MEAN DIA. = 0 10 102.49 µm VOLUME MEAN DIA. = 030 ... 353.82 µm SAUTER MEAN DIA. = 032 ... 993.23 µm

NUMBER MEDIAN DIA.=DN.1... (56 μm 0N.5... (56 μm 0N.5... 172.74 μm

VOLUME MEDIAN DIA.=0V.5...1312.10 µm 0V.9...1796.66 µm

Nozzle	to Airstrees	010 JET 0 deer		Slic AVG	e Rete	1.5 MHz 100
	Pressure	30 esi		OFM		1 cm.
Flow Re		50 mmh	••	BAR	to f	1.5 Probe 198 cm.
Tenk M		5% S1M.E	STERON 990	Sees	le interv	ve! 300 sec.
		95% WATE	×		er of Sec	
	C+\PMS\DATA\C of Tests Co				Specing Length	1.66 cm. 35 cm.
				500	Congen	
UPPER L1M1T	N(RAU)	N/SEC	G=/SEC	X N	% VOL.	ACCUMULATED S N S VOL.
56	3837 2	. 72E+06	0.09	61.65	0.07	61.65 0.07
89 122	5284	491210 338495	0.10	11.13	0.08	72.78 0.15 60.45 0.32
154	4345 3090	252316	0.35	5.72	0.17	60.45 0.32 66.17 0.60
187 220	1511 792	127344 70611	0.33 0.31	2.89	0.27	87.06 0.86
252	572	48841	0.33	1.40	0.27	90.66 1.11 91.76 1.38
284 318	418 394	34385 32614	0.35 0.47	0.78	0.28 0.38	92.54 1.66 93.28 2.04
351	345	26803	0.52	0.61	0.42	93.89 2.47
382 414	284 254	21556 18855	0.55 0.62	0.49	0.45	94.38 2.91 94.81 3.42
447	222	15561	0.45	0.35	0.53	75.16 3.74
47 9 512	195 192	14079 14094	0.73 0. 7 0	0.32 0.32	0.57	75.48 4.53 75.80 5.26
545	174	13684	1.05	0.31	0.85	76.11 6.11
578 611	155 122	12632 7799	1.17	0.29	0.94	96.39 7.06 96.62 7.94
644	127	7184	1.18	0.21	0.76	96.83 8.90
677 710	113 99	7654 8055	1.45	0.22 0.18	1.18	97.05 10.08 97.23 11.21
743	103	9002	1.60	0.20	1.46	97.43 12.67
776 809	86 93	7218 744 3	1.65 1.93	0.16	1.34	97.60 14.01 97.77 15.57
842	68 77	6004 7846	1.76	0.14	1.43	97.90 17.00 98.08 19.10
875 908	61	5887	2.18	0.13	1.76	78.08 17.10 78.21 20.86
941 974	64 40	7251 3994	2.99 1.83	0.16	2.42 1.48	98.38 .23.29 98.47 24.77
1007	42	4230	2.15	0.10	1.74	78.56 26.51
1040 1073	53 33	7736 5523	4.33 3.40	0.18	3.51 2.75	78.74 30.02 78.86 32.77
1106	42	5037	3.40	0.11	2.75	78.78 35.52
1139	23	3064	2.26	0.07	1.83	79.05 37.36
1172 1205	19 17	3145 2354	2.53 2.06	0.07	2.05 1.67	99.12 39.41 99.17 41.08
1238 1271	14 22	1698 3772	1.62 3.69	0.04	1.31 3.15	99.21 42.39 99.30 45.54
1304	10	1530	1.71	0.03	1.38	99.33 46.92
1337 1370	12	3128 1418	3.76 1.84	0.07 0.03	3.05 1.49	99.40 49.97 99.43 51.46
1403	17	1646	2.29	0.04	1.86	99.47 53.31
1436	10	2245 2070	3.35 3.31	0.05	2.72 2.68	99.52 56.03 99.57 58.71
1502	10	2476	4.24	0.04	3.43	99.62 62.15
1535 1568	6 7	1491 2277	2.73 4.44	0.03	2.21 3.60	99.66 64.36
1601	5 5	1032	2.14 2.59	0.02	1.74 2.10	99.73 69.69 99.76 71.79
1634 1667	2	1172 1397	3.28	0.03	2.66	99.79 74.45
1700 1733	2	1349 544	3.36 1.44	0.03	2.72 1.16	99.82 77.17 99.83 78.33
1766	1	230	0.64	0.01	0.52	77.84 78.86
1799 1832	2	726 477	2.15 1.49	0.02	1.74 1.21	99.86 80.59 99.87 81.80
1865	0	0	0.00	0.00	0.00	99.87 81.80
1898 1931	2 1	2464 338	8.58 1.24	0.04	4.74	99.92 88.75 99.93 89.75
1964	1	495	1.91	0.01	1.55	99.94 91.29
1997 20 3 0	2 1	1069 1502	6.41	0.02 0.03	3.52 5.19	99.97 94.81 100.00 100.00
TOTAL	2.35E+04	4.41E+06	123.49			
				1MAGES	23496/	29582 - 79.4%
NUMBER	R MEAN DIA	0,	112.77 um			
VOLUME	E MEAN DIA. =	0301	017.26 um			
NUMBER	R MEDIAN DIA.	0 _N .1	(56 um (56 um 206.36 um			
VOLUM	E MEDIAN DIA.	-U., 1.	674.33 um 337.18 um 935.87 um			
PELAT	IVE SPAN+ 0	94				

010 JET Slice Rate 1.5 MHz Nozzle AVG Angle to Airstream O degrees 100 30 psi Spray Pressure DFM 1 cm 50 BAR 1.5 Airspeed 2.35 gpm 10% SIM. VELPAR Flow Rate Distance to Probe 198 cm. Tank Mix Sample Interval 300 sec. 90% WATER Number of Samples Number of Scans 12 Scan Spacing FILE: C:\PMS\DATA\080586.009 1.66 cm. Number of Tests Combined: 2 Scan Length 35 cm. UPPER ACCUMULATED N(RAW) N/SEC Gm/SEC % N % VOL. % N % VOL. LIMIT -----3779 3.53E+06 60.46 0.12 60.46 0.07 0.07 599566 70.72 0.15 89 4687 0.12 10.27 0.07 122 3725 408500 0.25 6.99 0.16 77.71 0.30 2879 321299 5.50 83.22 0.58 154 0.44 0.28 1491 170118 187 0.44 2.91 0.28 86.13 0.85 220 1005 109818 0.48 1.88 0.30 88.01 1.15 89.43 83275 0.57 1.43 826 0.36 1.51 252 698 570 69133 1.18 90.62 1.94 284 0.69 0.43 0.77 91.53 318 53536 0.92 0.48 2.42 351 544 47738 0.93 0.82 0.58 92.35 3.01 382 493 43316 1.11 0.74 0.69 93.09 3.70 421 38779 93.76 4.50 414 1.28 0.66 0.80 94.27 447 330 29687 1.24 0.51 0.77 5.27 479 293 27422 1.42 0.47 0.89 94.73 6.16 291 0.43 95.17 7.17 25397 1.61 512 1.01 250 0.40 95.57 8.29 23287 545 1.12 95.95 9.59 578 238 22332 2.06 0.38 1.29 96.28 223 19445 2.13 0.33 1.33 10.92 611 182 20286 2.62 0.35 96.63 12.56 644 1.64 677 143 15507 2.33 0.27 1.46 96.90 14.01 710 128 12999 2.26 0.22 1.42 97.12 15.43 743 115 11331 2.27 0.19 1.42 97.31 16.85 2.20 97.58 19.05 0.26 776 115 15373 3.52 21.29 97.81 3.59 0.24 2.25 809 105 13810 90 2.19 98.02 23.48 842 11893 3.49 0.20 76 98.19 875 10414 3.44 0.18 2.15 25.63 8213 908 62 3.04 0.14 1.90 98.33 27.53 941 53 6584 2.72 0.11 1.70 98.45 29.23 974 56 8590 3.94 0.15 2.46 98.59 31.70 9152 5553 1007 60 4.64 0.16 2.91 98.75 34.60 38 1.95 98.85 36.55 3.11 1 040 0.10 1.98 29 98.93 1073 5126 3925 38.52 3.16 0.09 30 99.00 1106 2.65 0.07 1.66 40.18 1139 3363 21 2.48 0.06 1.55 99.06 41.74 4134 3154 1172 28 3.33 0.07 2.08 99.13 43.82 2.77 1.73 99.18 45.55 1205 15 0.05 5368 4381 3.20 99.28 48.75 22 17 1238 5.11 0.09 99.35 1271 4.52 0.07 2.83 51.58 3227 3433 17 99.41 1304 3.60 0.06 2.25 53.83 14 1337 4.13 0.06 2.58 99.46 56.41 1370 5 765 0.99 0.01 0.62 99.48 57.03 3869 1403 13 5.39 0.07 3.37 99.54 60.40 2458 2187 1710 9 99.59 1434 3.67 0.04 2.30 62.70 3.50 2.19 1469 11 99.62 0.04 64.89 2.93 99.65 1.83 66.72 1502 5 0.03 1808 1535 99.68 3.31 0.03 2.07 68.79 1568 3 1455 2.84 0.02 1.78 99.71 70.57 1601 8 3600 7.48 0.06 4.68 99.77 75.25 1634 0.91 99.78 661 1.46 0.01 76.17 1584 99.81 1667 3.72 0.03 2.33 78.50 3.38 1700 1356 0.02 2.12 99.83 80.61 99.86 1733 3 1876 4.96 0.03 83.71 3.10 99.88 84.98 1766 723 1189 2.02 1.27 0.01 99.90 1799 3.52 0.02 2.20 87.18 1832 2031 6.35 0.03 3.97 99.93 91.15 1865 2300 7.59 0.04 4.75 99.97 95.91 1898 0.71 99.98 96.61 324 1.13 0.01 99.98 97.48 1.39 1931 380 0.01 0.87 99.98 1964 0.00 0.00 0.00 97.48 C 991 1997 2.52 100.00 100.00 4.02 0.02 TOTAL 2.42E+04 5.84E+06 159.82 TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 24243/ 30422 = 79.7%

NUMBER MEDIAN DIA.=DN.1... (56 µm $_{\rm DN.5}$... (56 µm $_{\rm DN.9}$... 267.59 µm Relative Span = 0.99

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Slice Rate
AVG
OFM
BAR
                                                                         010 Jet
                                                                                                                                                                                                                  1.5 MHz
  Angle to Airstream D degrees
Spray Pressure 3C psi
A rspeed 50 mph
                                                                                                                                                                                                                      100
   A repeed
                                                                             2.35 gpm
   Flow Rate
                                                                                                                                                      Distance to Probe 170 cm.
    Tank Mix
                                                                                                                                                      Sample interval 300 sec.
                                                                                                                                                      Number of Samples
                                                                                                                                                    Number of Scans 8
                                                                                                                                                    Scan Sparing 6 cm.
   FILE: C:\PM5\DATA\06:08616.003
   Number of Tests Combined: 2
                                                                                                                                                   Scan Length
   HEPER
                                                                                                                                                                                                              ACCUMULATED
| Table | Tabl
                                                                   N/SEC Gm/SEC % N % VOL. % N % VOL.
   LIMIT
                         N(RAW)
                                                                       -----
                                                                                                                                             ---
                                   -----
                                                                                                                                               2.23
2.05
2.05
                                                                                                                  0.00
0.00
0.00
                                                                                                                                                                                                     99.97
                                                                                                                                                                                                                                96.60
                                                                                   1211 3.20
                                                                                                                                                5.03
                                                                                                                                                                            3.40
                                                                                                                                                                                                      100.00 160.00
    TOTAL 7.69E+03 3.84E+36 74.16
    TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 9686/ 11814 = 82.5%
   NUMBER MEAN DIA.= D..... 115.23 um VOLUME MEAN DIA.= D..... 619.65 um VOLUME MEAN DIA.= D..... 620.50 um VOLUME MEDIAN DIA.= D..... 619.65 um VOLUME MEDIAN DIA.= D..... 1526.69 um
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UPPER	N (D R W)	W /CRC	0=/580		A 1/OT		ULATED
LIMIT	N (RAW)	MYSEC	qm/SEC	7-N	7 AOF	3 N	. VOL.
56	544	689369	0.02	27.94	0.03	27.94	0.03
89	1642	279764	0.06	11.34	0.08	39.27	0.11
122	2111	279188	0.17	11.31	0.23	50.59	0.34
154	2081	273030	0.37	11.06	0.51	61.65	0.86
187	1472	200194	0.52	8.11	0.71	69.76	1.57
219	969	135534	0.59	5.49	0.82	75.26	2.39
252	722	100505	0.68	4.07	0.94	79.33	3.33
284	568	80520	0.81	3.26	1.11	82.59	4.44
318	461	63346	0.91	2.57	1.25	85.16	5.70
351	394	56744	1.11	2.30	1.53	87.46	7.22
382	285	40685	1.04	1.65	1.43	89.11	8.66
414	263	36333	1.20	1.47	1.65	90.58	10.30
447	217	31765	1.32	1.29	1.82	91.87	12.13
479	147	20036	1.04	0.81	1.43	92.68	13.56
512	121	17465	1.11	0.71	1.53	93.39	15.09
545	123	16459	1.27	0.67	1.74	94.05	16.83
578	93	13241	1.22	0.54	1.68	94.59	18.51
611	85	12462	1.37	0.50	1.88	95.09	20.40
644	75	10510	1.35	0.43	1.87	95.52	22.26
677	59	8844	1.33	0.36	1.83	95.88	24.09
710	63	9483	1.65	0.38	2.27	96.26	26.37
743	64	9512	1.90	0.39	2.62	96.65	28.99
776	43	6501	1.49	0.26	2.05	96.91	31.03
809	37	5712	1.48	0.23	2.04	97.14	33.08
842	53	8 36 1	2.46	0.34	3.38	97.48	36.46
875	41	6407	2.12	0.26	2.91	97.74	39.37
908	41	6 4 3 8	2.38	0.26	3.28	98.00	42.65
941	23	3840	1.58	0.16	2.18	98.16	44.84
974	32	5084	2.33	0.21	3.21.	98.36	48.05
1007	27	4719	2.39	0.19	3.30	98.56	51.34
1040	20	3693	2.07	0.15	2.85	98.71	54.19
1073	29	4767	2.94	0.19	4.04	98.90	58.23
1106	23	3948	2.67	0.16	3.67	99.06	61.91
1139	14	2379	1.76	0.10	2.42	99.15	64.33
1172	17	3088	2.49	0.13	3.43	99.28	67.75
1205	8	1 936	1.70	0.08	2.34	99.36	70.09
1238	10	1941	1.85	0.08	2.54	99.44	72.63
1271	12	2099	2.16	0.09	2.98	99.52	75.52
1304	6	1517	1.69	0.06	. 2.33	99.58	77.94
1337	4	1129	1.36	0.05	1.87	99.63	79.81
1370	9	26 14	3.39	0.11	4.66	99.74	84.48
1403	6	1574	2.19	0.06	3.02	99.80	87.50
1436	5	1745	2.61	0.07	3.59	99.87	91.09
1469	2	478	0.77	0.02	1.05	99.89	92.14
1502	1	419	0.72	0.02	0.99	99.91	93.13
1535	3	833	1.52	0.03	2.10	99.94	95.23
1568	1	488	0.95	0.02	1.31	99.96	96.54
1601	0	0	0.00	0.00	0.00	99.96	96.54
1634	1	293	0.65	0.01	0.89	99.97	97.43
1667	0	0	0.00	0.00	0.00	99.97	97.43
1700	ŏ	Ŏ	0.00	0.00	0.00	99.97	97.43
1733	2	706	1.87	0.03	2.57	100.00	100.00
1766	ō	0	0.00	0.00	0.00	100.00	100.00
	_						
TOTALS		2.47E 06	72.62				

TOTAL RAW PARTICLES.... 13029/14127-- 92.23%

NUMBER MEAN DIAMETER... 183.93 MICROMETERS S.D.... 208.74

VOLUME MEAN DIAMETER... 383.19 MICROMETERS S.D.... 642.30

SAUTER MEAN DIAMETER... 726.91 MICROMETERS

Reference #4

RD-7(D8-45), 90 Degrees, 40 psi, 50 mph, 0.84 gpm, Water

		_	
DFM=	1 . 01	5	MHZ

UPPER						V CC ni	HULATED
LIMIT	MIRAWL	й\ZĒĞ	4m/SEC	<u># N</u>	VOL.	<u> </u>	VOL.
56	1335	1.650 06	0.05	36.23	0.09	36.23	0.09
89	3220	550839	0.11	12.07	0.17	48.29	0.26
122	36 1 3	520040	0.32	11.39	0.50	59.69	0.76
154	31 34	467661	0.64	10.24	1.01	69.93	1.77
187	2218	330890	0.86	7.25	1.35	77.18	3.12
219	1557	234583	1.03	5.14	1.62	82.32	4.74
252	1076	160746	1.10	3.52	1.73	85.84	6.47
284	7 8 3	116147	1.17	2.54	1.84	88.38	8.31
318	6011	91391	1.31	2.00	2.08	90.39	10.39
351	474	68965	1.35	1.51	2,13	91.90	12.52
382	374	54186	1.38	1.19	2.19	93.08	14.71
414	293	47336	1.56	1.04	2.46	94.12	17.17
447	224	32723	1.36	0.72	2.15	94.84	19.32
479	198	276 40	1.43	0.61	2.26	95.44	21.59
512	168	25123	1.60	0.55	2.52	95.99	24.11
545	158	24418	1.88	0.53	2.97	96.53	27.08
578	144	21750	2.01	0.48	3.17	97.00	30.25
611	1 26	21691	2.38	0.48	3.76	97.48	34.01
644	109	18375	2.37	0.40	3.74	97.88	37.75
677	90	11990	1.80	0.26	2.85	98.14	40.60
710	71	9472	1.65	0.21	2.60	98.35	43.20
743	61	9919	1.99	0.22	3.14	98.57	46.34
776	57	9384	2.15	0.21	3.39	98.77	49.73
809	50	7405	1.92	0.16	3.04	98.94	52.77
842	34	5092	1.50	0.11	2.36	99.05	55.13
875 908	41 25	7211 3574	2.38 1.32	0.16	3.76 2.09	99.21 99.28	58.89 60.98
941	30	4297	1.77	0.09	2.80	99.38	63.78
974	24	4012	1.84	0.09	2.91	99.47	66.69
1007	23	3586	1.82	0.09	2.87	99.55	69.56
1040	17	3709	2.08	0.08	3.28	99.63	72.84
1073	ii	1952	1.20	0.04	1.90	99.67	74.74
1106	18	2804	1.89	0.06	2.99	99.73	77.73
1139	9	2146	1.59	0.05	2.50	99.78	80.24
1172	8	1432	1.15	0.03	1.82	99.81	82.06
1205	9	1726	1.51	0.04	2.39	99.85	84.45
1238	7	1562	1.49	0.03	2.35	99.88	86.80
1271	4	1673	1.73	0.04	2.73	99.92	89.52
1304	2	270	0.30	0.01	0.48	99.92	90.00
1337	2	431	0.52	0.01	0.82	99.93	90.82
1370	4	695	0.90	0.02	1.42	99.95	92.24
1403	1	135	0.19	0.00	0.30	99.95	92.54
1436	2	603	0.90	0.01	1.42	99.96	93.96
1469	1	1 36	0.22	0.00	0.34	99.97	94.31
1502	1	138	0.24	0.00	0.37	99.97	94.68
1535	1	146	0.27	0.00	0.42	99.97	95.10
1568	0	0	0.00	0.00	0.00	99.97	95.10
1601	0	0	0.00	0.00	0.00	99.97	95.10
1634	1	433	0.96	0.01	1.51	99.98	96.62

RD-7,90 Degrees,40 psi,50 mph

DTG 84/02/15 15:35:00

DFM=1.0--1.5 MHz

UPPER						ACCU	AULATED
LIMIT	M (RAW)	NZSEC	qm/SEC	<u>8_N</u>	VOL.	<u>₹</u> 74	NOL.
1667	0	0	0.00	0.00	0.00	99.98	96.62
1700	Ö	0	0.00	0.00	0.00	99.98	96.62
1733	0	0	0.00	0.00	0.00	99.98	96.62
1766	1	766	2.14	0.02	3.38	100.00	100.00
1799	U	0	0.00	0.00	0.00	100.00	100.00
TOTALS		4.56E 06	63.30				

TOTAL RAW PARTICLES.... 20422/23121-- 88.334

RUMBER MEAN DIAMETER... 144.57 MICROMETERS S.D.... 159.35

VOLUME MEAN DIAMETER... 296.19 MICROMETERS S.D.... 535.56

SAUTER HEAT DIAMETER... 572.76 MICKOMETERS

DNU.1... 0.00 AICROMETERS DV0.1... 311.09 MICROMETERS DV0.5... 778.46 MICROMETERS DV0.9... 310.94 MICROMETERS DV0.9... 1303.45 MICROMETERS

RD-7(D8-45), 0 Degrees, 40 psi, 100 mph, 0.84 gpm, Water
DTG 84/02/14 09:37:00

DFM=1.0--3.0 MHz

UPPER						A CCUM	ULATED
LIMIT	M (RAW)	NZSEC	qm/SEC	8 N	%_VOL.	<u>8 N</u>	NOL.
56	1668	3.95E 06	0.13	34.65	0.19	34.65	0.19
89	3477	1.34E 06	0.27	11.74	0.38	46.39	0.57
122	4335	1.45E 06	0.88	12.68	1.26	59.07	1.83
154	4068	1.26 E 06	1.72	11.02	2.47	70.09	4.30
187	3 26 0	900185	2.33	7.89	3.34	77.98	7.64
219	2617	6 26 8 3 4	2.74	5.49	3.93	83.47	11.57
252	2244	455578	3.10	3.99	4.45	87.46	16.02
284	1995	326 726	3.28	2.86	4.71	90.33	20.73
318	1649	256844	3.69	2.25	5.30	92.58	26.03
351	1302	171948	3.36	1.51	4.83	94.08	30.85
382	1059	134817	3.44	1.18	4.94	95.26	35.79
414	831	99612	3.28	0.87	4.70	96.14	40.49
447	716	86 325	3.60	0.76	5.16	96.89	45.65
479	592	78015	4.05	0.68	5.80	97.58	51.46
512	529 401	6 4 4 7 9 48 2 2 9	4.10 3.71	0.57	5.88	98.14	57.34
545 578	334	37058	3.42	0.42 0.32	5.33 4.91	98.57	62.66
611	254	32471	3.56	0.32	5.11	98.89 99.17	67.57 72.68
644	225	27039	3.49	0.24	5.00	99.17	77.68
677	148	17101	2.57	0.15	3.69	99.56	81.37
710	103	12589	2.19	0.11	3.14	99.67	84.51
743	76	11109	2.22	0.10	3.19	99.77	87.70
776	49	7146	1.63	0.06	2.34	99.83	90.04
809	36	5545	1.44	0.05	2.07	99.88	92.11
842	23	6580	1.93	0.06	2.77	99.94	94.88
875	13	1937	0.64	0.02	0.92	99.96	95.80
908	5	597	0.22	0.01	0.32	99.96	96.11
941	7	1769	0.73	0.02	1.05	99.98	97.16
974	0	0	0.00	0.00	0.00	99.98	97.16
1007	1	5.5	0.03	0.00	0.04	99.98	97.20
1040	3	1087	0.61	0.01	0.87	99.99	98.07
1073	0	0	0.00	0.00	0.00	99.99	98.07
1106	0	0	0.00	0.00	0.00	99.99	98.07
1139	0	0	0.00	0.00	0.00	99.99	98.07
1172	1	844	0.68	0.01	0.98	99.99	99.05
1205	1	755	0.66	0.01	0.95	100.00	100.00
1238	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.14E 07	69.71				

TOTAL RAW PARTICLES.... 32022/37523-- 85.34%

NUMBER MEAN DIAMETER... 132.92 MICROMETERS S.D.... 119.33

VOLUME MEAN DIAMETER... 226.90 MICROMETERS S.D.... 358.55

SAUTER MEAN DIAMETER... 366.11 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 206.76 MICROMETERS D_{V0.5}... 471.53 MICROMETERS P_{V0.5}... 471.53 MICROMETERS D_{V0.9}... 281.04 MICROMETERS D_{V0.9}... 774.92 MICROMETERS

Reference #4

RD-7(D8-45), 90 degrees, 40 psi, 100 mph, 0.84 gpm, Water DTG 84/02/15 13:49:00

DFM=1.0--3.0 MHz

110000						2.00***	
UPPER	J / DAW)	M /CEC	am/9.00	'2 AT	9 1/01		ULATED
LIMIT	N(RAW)	N/SEC	<u>am/SEC</u>	<u> 3 </u>	%_VOL.	<u>8 7</u> 1	%_VCL.
56	1991	7.49E 06	0.25	39.59	0.46	39.59	0.46
89	4152	2.45E 06	0.49	12.94	0.92	52.53	1.38
122	4389	2.58E 06	1.57	13.64	2.95	66.17	4.33
154	3532	2.00E 06	2.74	10.59	5.16	76.76	9.49
187	2760	1.43E 06	3.69	7.54	5.95	84.30 \	16.44
219	2164	934873	4.09	4.94	7.69	89.24	24.13
252	1756	597141	4.07	3.16	7.66	92.39	31.79
284	1830	538910	5.41	2.85	10.19	95.24	41.97
31კ	1491	355785	5.11	1.88	9.63	97.12	51.60
351	881	195690	3.83	1.03	7.21	93.16	58.81
382	466	110204	2.81	0.58	5.30	98.74	64.10
414	278	66778	2.20	0.35	4.14	99.09	68.24
447	156	51505	2.15	0.27	4.04	99.36	72.28
479	120	28273	1.47	0.15	2.76	99.51	75.04
512	64	21276	1.35	0.11	2.55	99.63	77.58
545	44	20182	1.55	0.11	2.92	99.73	80.51
578	21	9183	0.85	0.05	1.60	99.78	82.11
611	20	8276	0.91	0.04	1.71	99.83	83.81
644	14	8244	1.06	0.04	2.00	99.87	85.81
677	5	4421	0.66	0.02	1.25	99.89	87.06
710	2	504	0.09	0.00	0.17	99.89	87.23
743	4	3211	0.64	0.02	1.21	99.91	88.44
776	2	1203	0.28	0.01	0.52	99.92	88.96
809	2	5376	1.40	0.03	2.63	99.95	91.59
842	0	0	0.00	0.00	0.00	99.95	91.59
875	1	2227	0.74	0.01	1.38	99.96	92.97
908	1	3617	1.34	0.02	2.52	99.98	95.49
941	0	0	0.00	0.00	0.00	99.98	95.49
974	0	0	0.00	0.00	0.00	99.98	95.49
1007	0	0	0.00	0.00	0.00	99.98	95.49
1040	1	4281	2.40	0.02	4.51	100.00	100.00
1073	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.89E 07	53.13				

TOTAL RAW PARTICLES.... 26147/30448-- 85.87%

NUMBER MEAN DIAMETER... 109.50 MICROMETERS S.D.... 88.45

VOLUME MEAN DIAMETER... 175.11 MICROMETERS S.D.... 298.94

SAUTER MEAN DIAMETER ... 271.01 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 156.71 MICROMETERS D_{V0.5}... 311.81 MICROMETERS D_{V0.9}... 227.42 MICROMETERS D_{V0.9}... 788.60 MICROMETERS

Reference #4

RD-7(D8-45), 0 Degrees, 40 psi, 150 mph, 0.84 gpm, Water

DTG 84/02/13 03:33:00

DFM=1.0--4.0 MHz

UPPER						A CCU	1ULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	8 N	%_VOL.	<u>8_11</u>	%_VOL.
56	379	6.15E 06	0.20	32.81	0.55	32.81	0.55
89	1390	2.80E 06	0.56	14.91	1.50	47.72	2.05
122	1778	2.88E 06	1.75	15.34	4.72	63.06	6.77
154	1833	2.36E 06	3.23	12.58	8.71	75.64	15.48
187	1846	1.77E 06	4.58	9.43	12.38	85.07	27.86
219	1668	1.23E 06	5.37	6.55	14.51	91.63	42.37
252	1178	636075	4.33	3.39	11.70	95.02	54.07
284	706	369910	3.72	1.97	10.03	96.99	64.11
318	368	190682	2.74	1.02	7.40	98.00	71.51
351	26 3	147808	2.89	0.79	7.81	98.79	79.32
382	149	133981	3.42	0.71	9.24	99.51	88.55
414	72	33376	1.10	0.18	2.97	99.68	91.52
447	4 2	2 36 9 4	0.99	0.13	2.67	99.81	94.19
479	25	21114	1.09	0.11	2.96	99.92	97.14
512	11	3846	0.24	0.02	0.56	99.94	97.80
5 4 5	9	9959	0.77	0.05	2.07	100.00	99.87
578	1	502	0.05	0.00	0.13	100.00	100.00
611	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		1.88E 07	37.03				

TOTAL RAW PARTICLES.... 11718/13799-- 84.92%

NUMBER MEAN DIAMETER... 110.42 MICRONETERS S.D.... 75.14

VOLUME MEAN DIAMETER... 155.70 MICROMETERS S.D.... 209.27

SAUTER MEAN DIAMETER... 211.59 MICROMETERS

R.S.... 1.10

Reference #4

RD-7(D8-45), 90 degrees, 40 psi, 150 mph, 0.84 gpm, Water
D'TG 84/02/15 14:01:00

DFM=1.0--4.0 MHz

UPPER						A CC UN	MULATED
TIMIT	NJRAWI	N\ZEC	āw\ZĒC	8 14	&_VOL.	<u>₹_N</u>	%_VOL.
56	488	9.60E 06	0.32	33.52	1.01	33.52	1.01
89	1894	5.08£ 06	1.01	17.75	3.24	51.28	4.25
122	2689	5.39₺ 06	3.27	13.81	10.48	70.09	14.72
154	2762	4.01E 06	5.48	14.00	17.55	84.08	32.28
187	1958	2.34E 06	6.07	8.18	19.43	92.27	51.71
219	1299	1.19E 06	5.21	4.16	16.68	96.43	68.39
252	615	711423	4.85	2.48	15.52	98.91	83.91
284	145	202524	2.03	0.71	6.51	99.62	90.43
318	34	49058	0.71	0.17	2.26	99.79	92.69
351	22	27941	0.55	0.10	1.75	99.89	94.44
382	5	15113	0.39	0.05	1.24	99.94	95.67
414	3	1580	0.05	0.01	0.17	99 .9 5	95.84
447	2	612	0.03	0.00	0.08	99.95	95.92
479	0	U	0.00	0.00	0.00	99.95	95.92
512	0	0	0.00	0.00	0.00	99.95	95.92
545	1	1736	0.13	0.01	0.43	99.96	96.35
578	1	12348	1.14	0.04	3.65	100.00	100.00
611	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		2.86E 07	31.23				

TOTAL RAW PARTICLES.... 11918/14293-- 83.38%

NUMBER MEAN DIAMETER... 96.72 MICROMETERS S.D.... 57.59

VOLUME MEAN DIAMETER... 127.75 MICROMETERS S.D.... 173.90

SAUTER MEAN DIAMETER... 164.55 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 107.06 MICROMETERS D_{V0.5}... 184.37 MICROMETERS D_{V0.9}... 178.13 MICROMETERS D_{V0.9}... 282.62 MICROMETERS

DTG 84/09/14 09:45:00

DFM=2.0--1.5 MHz

UPPER						ACCITA	ULATED
LIMIT	I (RAW)	1/SEC	qm/SEC	8 11	% VOL.	8_N	§ VOL.
56	452	1.45C 06	0.05	30.78	0.03	30.78	
89	1500	669942	0.13	14.22	0.03	45.00	0.03 0.12
122	2298	393441	0.24	8.35	0.16	53.35	0.12
154	2299	460405	0.63	9.77	0.42	63.12	0.71
187	1655	355139	0.92	7.54	0.62	70.65	1.33
219	1003	239199	1.05	5.08	0.70	75.73	2.03
252	621	148170	1.01	3.14	0.68	78.87	2.71
284	505	127846	1.28	2.71	0.86	81.58	3.58
318	448	114108	1.64	2.42	1.10	84.01	4.68
351	311 316	81348 7890 9	1.59 2.01	1.73 1.67	1.07 1.36	85.73 87.41	5.75 7.11
382 414	292	65780	2.17	1.40	1.46	88.80	8.57
447	273	64718	2.70	1.37	1.62	90.17	10.38
479	239	55937	2.90	1.19	1.95	91.36	12.34
512	216	49122	3.12	1.04	2.10	92.40	14.44
545	164	42116	3.24	0.89	2.18	93.30	16.62
578	135	29724	2.74	0.63	1.85	93.93	18.47
611	147	29723	3.26	0.63	2.19	94.56	20.67
644 677	108 105	24 900 2 26 3 9	3.21 3.40	0.53 0.48	2.16 2.29	95.09 95.57	22.83 25.12
710	92	19616	3.41	0.42	2.30	95.98	27.42
743	89	13779	3.76	0.40	2.53	96.38	29.95
775	77	17147	3.92	0.36	2.64	96.75	32.59
809	78	16859	4.39	0.36	2.95	97.10	35 .54
842	53	13241	3.89	0.28	2.52	97.33	33.16
875	58	12123	4.00	0.25	2.70	97.54	40.96
903 941	4.5 4.5	17746	6.56	0.33	4.42	98.02 93.22	45.23
974	43	9361 10962	3.86 5.02	0.20 0.23	3.38	93.45	47.88 51.27
1007	39	10333	5.24	0.22	3.53	98.57	54.80
1040	22	6755	3.79	0.14	2.55	93.31	57.35
1073	30	7 03 9	4.34	0.15	2.92	93.96	63.27
1103	19	4797	3.24	0.10	2.13	99.06	52.45
1139	23	6090	4.50	0.13	3.03	99.19	65.43
1172	17	4102	3.31	0.09	2.23	99.23	67.71
1235 1235	12 18	3319 5392	2.91 5.13	0.07 0.11	1.95 3.46	99.35 99.46	59.57 73.13
1271	12	3295	3.40	0.11	2.29	99.53	75.41
1334	7	2222	2.43	0.05	1.57	99.58	77.03
1337	5	2590	3.12	0.05	2.10	99.64	79.13
1370	6	2955	3.83	0.06	2.53	99.70	31.76
1403	5	1379	1.92	0.03	1.29	99.73	33.05
1435 1459	3 5	349	1.42	0.02	0.96 2.50	99.75 99.30	34.01 35.51
1502	5	2323 2787	3.72 4.77	0.05 0.06	3.21	99.86	89.73
1535	3	1109	2.03	0.00	1.37	99.58	31.09
1568	5	32 75	6.39	0.07	4.30	99.95	95.40
1601	1	47ó	0.99	0.01	0.67	99.96	96.06
1534	0	o o	0.00	0.00	0.00	99.96	96.06
1667	0	0	0.00	0.00	0.00	99.96	96.06
1700	o	0	0.00	0.00	0.00	99.96	96.06
1733	0	0	0.00	0.00	0.00 1.35	99.96 99.98	96.06 97.41
1766 1799	1 0	714 0	2.00 0.00	0.02 0.00	0.00	99.98	97.41
1832	o o	0	0.00	0.00	0.00	99.98	97.41
1865	i	1166	3.95	0.02	2.59	100.00	100.00
1893	Ō	0	0.00	0.00	0.00	100.00	100.00
TOTALS		4.71E 06	143.48				
1011.00			2.00.0				

TOTAL RAW PARTICLES.... 13921/16284-- 85.49%

NUMBER MEAN DIAMETER... 184.36 MICROMETERS S.D.... 217.30

VOLUME MEAN DIAMETER... 392.00 MICROMETERS S.D.... 656.74

SAUTER MEAN DIAMETER... 741.73 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 440.34 MICROMETERS D_{V0.5}... 961.15 MICROMETERS R.S.... 1.11 D_{N0.9}... 443.12 MICROMETERS D_{V0.9}...1508.11 MICROMETERS

Esteron 99 RD-7(D8-46), 45 Degrees, 50 mph, 30 psi, 1.5 gpm DTG 84/09/05 12:11:00

DFM=1.0--1.5 MHz

UPPER						ACCU	ULATED
FINI 5	N(RAW)	AKSEC	qm∠SEÇ	1_3	1 VOL.	7 7	1 YOL.
56	991	3.21E 06	0.11	40.61	0.06	40.61	0.06
89	1993	753574	0.15	9.54	0.09	50.15	0.15
122	2290	754490	0.46	9.55	0.26	59.70	0.41
154	2165	733697	1.00	9.29	0.57	68.98	0.98
187	1418	519253	1.34	6.57	0.76	75.55	1.74
219	888	372080	1.63	4.71	0.92	80.26	2.67
252	582	253462	1.73	3.21	0.98	83.47	3.65
284	435	193706	1.95	2.45	1.11	85.92	4.75
318	346	156450	2.25	1.98	1.28	87.91	6.03
351	291	140182	2.74	1.77	1.56	89.68	7.59
382	232	119442	3.05 3.14	1.51	1.73	91.19	9.32
414 447	196 167	95397 35492	3.56	1.21	1.79 2.03	92.40 93.48	11.11
479	116	57602	2.99	0.73	1.70	94.21	13.14
512	79	37911	2.41	0.48	1.37	94.69	16.20
545	90	45005	3.46	0.57	1.97	95.26	18.17
578	71	30409	2.81	0.38	1.50	95.64	19.77
611	55	30778	3.37	0.39	1.92	96.03	21.69
644	67	38 36 3	4.95	0.49	2.81	96.52	24.50
677	50	27728	4.17	0.35	2.37	96.87	26.87
710	42	22714	3.95	0.29	2.25	97.16	29.12
743	46	28953	5.79	0.37	3.29	97.52	32.41
7 7 5	39	15471	3.54	0.20	2.01	97.72	34.42
809	29	16218	4.21	0.21	2.40	97.93	36.82
842	31	16778	4.93	0.21	2.80	98.14	39.62
875	32	18251	6.03	0.23	3.43	98.37	43.05
903	23	12808	4.74	0.16	2.69	93.53	45.74
941	35	16945	6.99	0.21	3.97	98.75	49.71
974	24	11473 9959	5.26 5.05	0.15 0.13	2.99 2.87	98.89	52.70
1007 1040	15 21	10450	5.85	0.13	3.33	99.02 99.15	55.58 53.90
1073	9	6612	4.07	0.13	2.31	99.23	61.22
1106	13	11907	8.04	0.15	4.57	99.33	55.79
1139	9	6374	4.71	0.03	2.63	29.45	63.47
1172	Ģ	3375	2.72	0.04	1.55	99.51	70.01
1205	10	6861	6.02	0.09	3.42	99.59	73.43
1238	5	3655	3.48	0.05	1.99	99.64	75.41
1271	3	2274	2.35	0.03	1.33	99.57	76.74
1304	2	301	0.89	0.01	0.51	99.59	77.25
1337	3	3473	4.18	0.04	2.33	29.72	79.63
1370	3	2643	3.42	0.03	1.95	99.76	31.53
1403	4	5945	8.28	0.08	4.71	99.83	96.29
1436	3	2953	4.26	0.04	2.42	99.37	89.71
1469 1502	2 0	2062 3	3.30 0.00	0.03 0. 0 0	1.38	99.89 99.89	90.58 90.58
1535	2	3286	6.01	0.04	3.42	99.09	94.00
1568	0	0	0.00	0.00	0.00	99.94	94.00
1601	ĭ	5076	10.55	0.06	5.00	100.00	100.00
1634	ō	0	0.00	0.00	0.00	100.00	100.00
TOTALS		7.90E 06	175.91				

TOTAL RAW PARTICLES.... 12949/15672-- 82.63%

NUMBER MEAN DIAMETER... 155.80 MICROMETERS S.D.... 191.32

VOLUME MEAN DIAMETER... 349.18 MICROMETERS S.D.... 609.04

SAUTER MEAN DIAMETER... 699.34 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 394.46 MICROMETERS D_{V0.5}... 943.66 MICROMETERS D_{V0.5}... 943.66 MICROMETERS D_{V0.9}... 1458.24 MICROMETERS

DTG 84/09/05 10:21:00

DFM=1.0--1.5 MHz

UPPER						ACCU:	1ULATED
LIMIT	N(RAW)	ĭ√SEC	qm/SEC	<u>₹ N</u>	%_VOL.	<u>8 N</u>	%_VOL.
56	1103	6.00E 06	0.20	47.28	0.13	47.28	0.13
89	1949	1.37E 06	0.27	10.79	0.13	58.07	0.31
122	1907	1.22E 06	0.74	9.61	0.50	67.68	0.81
154	1751	1.17E 06	1.61	9.24	1.07	76.92	1.88
187	1065	725803	1.88	5.72	1.26	82.64	3.14
219	651	482816	2.11	3.80	1.41	86.44	4.55
252	453	345523	2.35	2.72	1.57	89.16	6.12
284	293	225183	2.26	1.77	1.51	90.93	7.63
318	216	164402	2.36	1.29	1.58	92.23	9.21
351	173	137471	2.69	1.08	1.80	93.31	11.01
352	131	102710	2.62	0.81	1.75	94.12	12.75
414	126	109672	3.61	0.86	2.41	94.98	15.18
447	102	78444	3.27	0.62	2.13	95.60	17.36
479	87	64322	3.34	0.51	2.23	96.11	19.59
512	83	8 2 6 2 0	5.25	0.65	3.51	96.76	23.10
545	64	42963	3.31	0.34	2.21	97.10	25.31
578	58	39138	3.61	0.31	2.42	97.40	27.73
611	39	32134	3.52	0.25	2.35	97.66	30.08
644	40	25462	3.28	0.20	2.19	97.86	32.28
677	41	32240	4.85	0.25	3.24	98.11	35.52
710	25	20126	3.50	0.16	2.34	98.27	37.86
743	23	15258	3.05	0.12 0.32	2.04	98.39	39.90
776	33	40478	9.26 4.87	0.32	5.19 3.26	98.71 98.86	46.08
809	30 25	18756	5.41	0.15	3.51	99.00	49.34
842 875	26	13415 22982	7.59	0.13	5.07	99.19	52.96 58.03
908	16	12092	4.47	0.10	2.39	99.28	61.02
941	12	9366	3.86	0.10	2.58	99.35	63.60
974	11	12369	5.67	0.10	3.79	99.45	67.39
1007	ii	12700	6.45	0.10	4.31	99.55	71.70
1040	îî	17321	9.70	0.14	6.48	99.68	78.19
L073	7	9441	5.81	0.07	3.89	99.76	82.07
1106	ıi	9416	6.36	0.07	4.25	99.83	86.32
1139	2	3059	2.28	0.02	1.52	99.86	87.84
172	3	4174	3.36	0.03	2.25	39.89	90.09
1205	2	629	0.55	0.00	0.37	99.90	90.46
1238	3	5806	5.53	0.05	3.59	99.94	94.15
1271	1	604	0.52	0.00	0.42	99.95	94.57
1304	1	4030	4.55	0.03	3.04	99.93	97.51
1 3 37	1	409	0.49	0.00	0.33	20 22	97.94
1 3 70	1	2390	3.08	0.02	2.05	100.00	100.00
14J3	ა	0	0.00		0.00		100.00
TOTALS		1.270 07	149.62				
יר זגירים:	AW DARTI	21 2 C	0507/1261		4.0		
		CLES 1 METER 12			4 8		

NUMBER MEAN DIAMETER... 124.94 MICPOMETERS 5.0... 152.50

VOLUME MEAN DIAMETER... 282.42 MICROMETERS S.D.... 497.87

SAUTER MEAN DIAMETER... 579.59 MICROMETERS

D_{M0.5}... 0.00 MICROMETERS 64.58 MICROMETERS D_{V0.1}... 332.72 MICROMETERS D_{V0.5}... 814.52 MICROMETERS R.S.... 1.03

DNO.9... 267.42 MICROMETERS DV0.9...1170.15 MICROMETERS

RD-7(D8-46), 0 Degrees, 50 mph, 30 psi, 1.5 gpm, Garlon org 84/09/14 10:51:00

DPM=2.0--1.5 MHz

UPPER						A CCU	ULATED
Fiait	J(RAW)	4/25C	23E2EP	1 4	VOL.	7 - A	1 VOL.
56	386	944997	0.03	26.16	0.02	26.16	0.02
89	1477	423716	. 0.08	11.73	0.05	37.69	0.07
122	2053	274266	0.17	7.59	0.09	45.48	0.16
154	2105	337482	0.46	9.34	0.26	54.83	0.42
107	1463	273790	0.71	7.58	0.40	62.41	0.83
219	912	196304	0.86	.5.43	0.49	67.84	1.31
252	653	157154	1.07	4.35	0.61	72.19	1,92
284	521	136690	1.37	3.78	0.78	75.98	2.70
318	412	106175	1.53	2.94	0.87	78.92	3.57
351	357	90510	1.77	2.51	1.01	81.42	4.58
382	295	73946	1.89	2.05	1.07	83.47	5.65
414	278	68744	2.26	1.90	1.29	85.37	6.94
447	247	63082	2.63	1.75	1.49	87.12	8.43
479	222	54116	2.81	1.50	1.60	88.62	10.03
512	173	40241	2.56	1.11	1.45	89.73	11.48
545	158	36963	2.85	1.02	1.62	90.75	13.10
578	150	32900	3.04	0.91	1.73	91.66	14.83
611	127 98	30952 20964	3.39 2.70	0.86	1.93	92.52	16.76
644 677	98	21960	3.30	0.61	1.54	93.10 93.71	18.30 20.17
710	85	19192	3.34	0.53	1.90	94.24	22.07
743	90	19731	3.95	0.55	2.25	94.79	24.32
776	17	17656	4.04	0.49	2.30	95.28	26.61
309	75	17034	4.43	0.47	2.52	95.75	29.13
342	61	12650	3.71	0.35	2.11	96.10	31.24
875	55	11976	3.96	0.33	2.25	96.43	33.49
908	45	10451	3.87	0.29	2.20	96.72	35.69
941	36	9781	4.04	0.27	2.29	96.99	37.99
974	33	7174	3.29	0.20	1.87	97.19	39.86
1007	43	13453	6.83	0.37	3.88	97.56	43.74
1040	32	6702	3.75	0.19	2.13	97.75	45.87
, 1073	38	11649	7.17	0.32	4.03	98.07	49.95
1106	27	6704	4.53	0.19	2.57	98.25	52.53
1139	27	8002	5.91	0.22	3.36	93.48	55.99
1172	25	7404	5.97	0.20	3.39	98.53	59.28
1205	21	5991	5.17	0.16	2.94	98.84	62.22
1238	14	5253	5.00 7.40	0.15	2.84	99.99	65.06
1271	20 8	7174 3543	3.95	0.20	4.21	99.19 99.29	69.27 71.51
1304 1337	7	2796	3.36	0.08	1.91	99.36	73.43
1370	7	3209	4.16	0.03	2.36	99.45	75.79
1403	6	1099	1.53	0.03	0.87	99.43	76.66
1436	5	2528	3.78	0.07	2.15	99.55	78.81
1469	í	2832	4.53	0.03	2.53	99.53	\$1.39
1502	3	2211	3.79	0.05	2.15	99.59	83.54
1535	2	1268	2.32	0.04	1.32	93.73	94.86
1568	2	575	1.12	0.02	0.54	99.74	95.50
1601	3	2191	4.55	0.06	2.59	93.90	38.09
1634	3	2243	4.96	0.06	2.82	99.87	90.91
1667	1	1346	3.16	0.04	1.80	99.90	92.70
1700	0	0	0.00	0.00	0.00	99.90	92.70
1733	0	0	0.00	0.00	0.00	99.90	92.70
1766	0	0	0.00	0.00	0.00	99.90	92.70
1799	0	0	0.00	0.00	0.00	99.90	92.70
1832	0	0	0.00	0.00	0.00	99.90	92.70
1865	0	0	0.00	0.00	0.00	99.90	92.70
1898	0	0	0.00	0.00	0.00	99.90	92.70
1931	1	3499 0	12.83	0.10	7.30 0.00	100.00	100.00
1964	U		0.00	0.00	0.00	200.00	100.00
TOTALS		3.61E 06	175.86				

** TOTAL RAW PARTICLES.... 13049/15203-- 85.83%

NUMBER MEAN DIAMETER... 221.63 MICROMETERS S.D... 252.22

VOLUME MEAN DIAMETER... 453.21 MICROMETERS S.D... 738.34

SAUTER MEAN DIAMETER... 825.73 MICROMETERS

Did.1... 0.00 MICROMETERS DV0.1... 479.22 MICROMETERS

D.J.5... 137.55 MICROMETERS DV0.5...1073.14 MICROMETERS

DJ0.9... 520.52 MICROMETERS DV0.9...1622.90 MICROMETERS

RD-7(D8-46), 45 Degrees, 50 mph, 30 psi, 1.5 gpm, Garlon ptg 80/09/00 16:00:00

ACCUMULATED

DFM=2.0--1.5 MHz

UPPER

UPPER						ACCUM	ULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	<u> </u>	% VOL.	8 N	& VOL.
56	306	1.43E 06	0.05	30.07	0.03	30.07	0.03
89	1034	572895	0.11	12.04	0.08	42.11	0.11
122	1540	368 302	0.22	7.74	0.15	49.85	0.25
154	1723	449336	0.61	9.44	0.41	59.29	0.66
187	1357	391947	1.02	8.24	0.67	67.53	1.33
219	82 7	265071	1.16	5.57	0.77	73.10	2.10
252	610	229051	1.56	4.81	1.03	77.91	3.14
284	419	157331	1.58	3.31	1.05	81.21	4.18
318	348	130761	1.88	2.75	1.24	83.96	5.43
351	261	93175	1.82	1.96	1.21	85.92	6.63
382	203	86194	2.20	1.81	1.46	87.73	8.09
414	211	84054	2.77	1.77	1.83	89.50	9.93
447		55047	2.29	1.16	1.52	90.65	
	138						11.44
479	127	48 350	2.51	1.02	1.66	91.67	13.11
512	95	37463	2.38	0.79	1.58	92.46	14.68
545	99	37812	2.91	0.79	1.93	93.25	16.61
57 8	74	32631	3.01	0.69	2.00	93.94	18.61
611	68	23307	2.55	0.49	1.69	94.43	20.30
644	66	22847	2.95	0.48	1.95	94.91	22.25
677	65	23979	3.61	0.50	2.39	95.41	24.64
710	56	24134	4.20	0.51	2.78	95.92	27.42
743	56	22459	4.49	0.47	2.98	96.39	30.40
776	41	11228	2.57	0.24	1.70	96.63	32.10
809	35	15203	3.95	0.32	2.62	96.95	34.71
842	40	17787	5.22	0.37	3.46	97.32	38.17
875				0.37			
	31	12933	4.27		2.83	97.59	41.00
908	27	12061	4.46	0.25	2.96	97.84	43.96
941	30	14047	5.80	0.30	3.84	98.14	47.80
974	26	13591	6.23	0.29	4.13	98.42	51.92
1007	30	8988	4.56	0.19	3.02	98.61	54.95
1040	19	9136	5.12	0.19	3.39	98.81	58.33
1073	12	4975	3.06	0.10	2.03	98.91	60.36
1106	16	6122	4.14	0.13	2.74	99.04	63.10
1139	12	5505	4.07	0.12	2.69	99.15	65.80
1172	13	7530	6.07	0.16	4.02	99.31	69.81
1205	8	5253	4.61	0.11	3.05	99.42	72.87
1238	6	3246	3.09	0.07	2.05	99.49	74.91
1271	6	3691	3.81	0.08	2.52	99.57	77.43
1304	5	2730	3.04	0.06	2.02	99.63	79.45
1337	ĭ	47	0.06	0.00	0.04	99.63	79.49
1370	3	1135	1.47	0.02	0.97	99.65	80.46
1403	1	545			0.97		
			0.76	0.01	0.50	99.66	80.96
1436	3	3295	4.92	0.07	3.26	99.73	84.23
1469	1	392	0.63	0.01	0.42	99.74	84.64
1502	5	7439	12.74	0.16	8.44	99.90	93.08
1535	0	0	0.00	0.00	0.00	99.90	93.08
1568	0	0	0.00	0.00	0.00	99.90	93.08
1601	1	3585	7.45	0.08	4.94	99.97	99.02
1634	1	1354	2.99	0.03	1.98	100.00	100.00
1667	ō	0	0.00	0.00	0.00	100.00	100.00
	·			0.00	0.00	200,00	100,00
TOTALS		4.76E 06	150.97				
TOTAL I	RAW PARTI	CLES	10056/125	69 80.	01%		
NUMBER	MEAN DIA	AMETER 1	89.97 MIC	ROMETERS	S.D	216.54	
						640.03	

Reference #12

DNO.9... 428.66 MICROMETERS

SAUTER MEAN DIAMETER... 731.00 MICROMETERS

VOLUME MEAN DIAMETER... 392.91 MICROMETERS S.D.... 649.81

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 415.94 MICROMETERS $D_{v0.5}...$ 958.11 MICROMETERS R.S.... 1.12

DV0.9...1489.45 MICROMETERS

RD-7(D8-46), 90 Degrees, 50 mph, 30 psi, 1.5 gpm, Garlon

DTC 84/09/17 15:21:00

DFM-2.0--1.5 MHz

UPPER						ACCU	HULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	N N	& VOL.	1 N	VOL.
56	574	2.49E 06	0.08	40.25	0.08	40.25	0.08
89	1008	737654	0.15	11.94	0.14	52.19	0.21
122	1236	413731	0.25	6.70	0.24	58.88	0.45
154	1468	541918	0.74	8.77	0.69	67.65	1.14
187	1136	410978	1.06	6.65	1.00	74.30	2.14
219	765	335842	1.47	5.43	1.37	79.74	3.51
25 2	469	218972	1.49	3.54	1.40	83.28	4.91
284	358	182194	1.83	2.95	1.71	86.23	6.62
318	198	95877	1.38	1.55	1.29	87.78	7.91
351	190	110647	2.16	1.79	2.03	89.57	9.94
382	155	84761	2.16 2.42	1.37 1.19	2.03 2.27	90.94	11.97
414 447	112 125	73504 66633	2.78	1.19	2.60	92.13 93.21	14.23 16.83
479	100	58028	3.01	0.94	2.82	94.15	19.65
512	76	43111	2.74	0.70	2.57	94.85	22.21
545	74	44918	3.46	0.73	3.24	95.57	25.45
578	66	28671	2.65	0.46	2.48	96.04	27.93
611	58	30370	3.33	0.49	3.12	96.53	31.04
644	51	20841	2.69	0.34	2.52	96.87	33.56
677	50	22174	3.33	0.36	3.12	97.23	36.68
710	48	21542	3.75	0.35	3.51	97.57	40.19
743	56	26874	5.38	0.43	5.03	98.01	45.22
776	45	21124	. 4.83	0.34	4.52	98.35	49.75
809	33	11062	2.87	0.18	2.69	98.53	52.44
842	31	10938	3.21	0.18	3.01	98.71	55.44
875	30	16190	5.35 4.74	0.26 0.21	5.01 4.44	98.97 99.18	60.45 64.89
908 941	28 20	12818 10190	4.20	0.16	3.94	99.34	68.83
974	17	7087	3.25	0.10	3.04	99.46	71.87
1007	14	4546	2.31	0.07	2.16	99.53	74.03
1040	îi	5045	2.83	0.03	2.54	99.61	75.67
1073	6	2581	1.59	0.04	1.49	99.65	73.16
1106	13	4140	2.80	0.07	2.52	99.72	80.78
1139	0	ο	0.00	0.00	0.00	99.72	80.78
1172	3	3774	3.04	0.06	2.35	99.73	83.62
1205	1	61	0.05	0.00	0.05	99.79	83.57
1238	3	2068	1.97	0.03	1.84	99.82	85.52
1271	1	43	0.04	0.00	0.04	99.82	. 85.56
1 30 4	3	1440	1.61	0.02	1.50	99.84	97.06
1337	1	1962 0	2.36 0.00	0.03	2.21 0.00	99.87 99.87	89.27 89.27
1373	0 1	4388	6.11	0.00	5.72	99.34	94.99
1403 1436	1	3582	5.35	0.06	5.01	100.00	100.00
1469	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS	ŭ	6.18E 06	106.82				

TOTAL RAW PARTICLES.... 8640/11157-- 77.44%

NUMBER MEAN DIAMETER... 153.23 MICROMETERS S.D.... 177.02

VOLUME MEAN DIAMETER... 320.93 MICROMETERS S.D.... 542.32

SAUTER MEAN DIAMETER... 603.00 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 351.93 MICROMETERS D_{V0.5}... 778.61 MICROMETERS R.S.... 1.31

Dv0.9...1373.72 MICROMETERS

DNO.9... 361.27 MICROMETERS

Reference #12

DTG 84/09/24 11:31:00

DFM=2.0--1.5 MHz

UDDED) CCID	UII AMED
UPPER LIMIT	N (RAW)	N/SEC	qm/SEC	8 N	% VOL.	% N	ULATED VOL.
56	472	1.60E 06	0.05	37.73	0.04	37.73	0.04
89	1500	496680	0.10 0.21	11.70	0.08	49.43	0.12
122	218 7 2308	339590 361764	0.49	8.00 8.52	0.16	57.42	0.27
154 187	1812	302116	0.78	7.11	0.38 0.60	65.94 73.06	0.65 1.25
219	1260	215905	0.94	5.08	0.72	78.14	1.97
252	872	140783	0.96	3.32	0.73	81.46	2.70
284	717	121092	1.22	2.85	0.93	84.31	3.63
318	551	93818	1.35	2.21	1.03	86.52	4.66
351	461	85 3 26	1.67	2.01	1.28	88.53	5.94
38 2	395	64942	1.66	1.53	1.27	90.06	7.20
414	339	48635	1.60	1.15	1.22	91.20	8.43
447	311	40891	1.70	0.96	1.30	92.17	9.73
479	256	32851	1.70	0.77	1.30	92.94	11.03
512	244	37878	2.41	0.89	1.84	93.83	12.87
545	209 189	28564 22478	2.20 2.08	0.67 0.53	1.68	94.50	14.55
5 7 8 611	159	16507	1.81	0.33	1.59 1.38	95.03 95.42	16.13 17.52
644	150	15678	2.02	0.37	1.54	95.79	19.06
677	120	14696	2.21	0.35	1.69	96.14	20.75
710	131	13878	2.42	0.33	1.85	96.46	22.59
743	104	10281	2.06	0.24	1.57	96.71	24.17
776	87	11299	2.58	0.27	1.97	96.97	26.14
809	71	8681	2.26	0.20	1.72	97.18	27.86
842	70	6461	1.90	0.15	1.45	97.33	29.31
875	75	9357	3.09	0.22	2.36	97.55	31.67
903	70	13971	5.17	0.33	3.95	97.88	35.62
941	48	7134	2.94	0.17	2.25	93.05	37.87
9 7 4 10 0 7	48 52	62 6 7 11030	5.60	0.15 0.26	2.19 4.28	98.19 98.45	40.06 44.34
1040	43	7035	3.94	0.17	3.01	98.62	47.35
1073	40	4624	2.85	0.11	2.13	93.73	49.52
1106	31	3845	2.60	0.09	1.93	98.82	51.51
1139	34	4950	3.66	0.12	2.79	98.94	54.30
1172	35	10265	8.27	0.24	6.32	99.13	50.62
1205	34	4768	4.18	0.11	3.19	99.29	63.82
1233	20	4231	4.03	0.10	3.03	99.39	66.89
1271	13	3199	3.30	0.03	2.52	99.46	69.41
1304	10	1462	1.53	0.03	1.24	99.50	70.66
1337 1370	19 10	2088 1 7 22	2.51 2.23	0.05 0.04	1.92 1.70	99.55 99.59	72.53 74.28
1403	10	1617	2.25	0.04	1.72	99.63	76.00
1436	7	4040	6.04	0.10	4.61	99.72	80.61
1469	7	2185	3.50	0.05	2.57	99.77	33.28
1502	4	2206	3.78	0.05	2.39	99.82	86.17
1535	6	729	1.33	0.02	1.02	99.84	87.19
1568	3	733	1.43	0.02	1.09	99.86	83.28
1601	9	2130	4.43	0.05	3.38	99.91	91.66
1634	1	304	0.67	0.01	0.51	99.92	92.18
1667	2	394	0.93	0.01	0.71	99.93	92.88
1700	1	878	2.19	0.02	1.67	99.95 99.95	94.56 95.27
1733 1 7 66	2 2	354 518	0.94 1.45	0.01 0.01	0.71 1.11	99.95	96.38
1799	1	173	0.51	0.00	0.39	99.97	96.77
1832	ō	0	0.00	0.00	0.00	99.97	96.77
1865	ì	167	0.55	0.00	0.42	99.98	97.19
1898	ī	1057	3.68	0.02	2.81	100.00	100.00
1931	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		4.25E 06	130.91				
1011111			230.72				

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TOTAL RAW PARTICLES.... 15619/18019-- 86.68%
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S.D.... 677.81 VOLUME MEAN DIAMETER... 389.17 MICROMETERS

SAUTER MEAN DIAMETER... 791.16 MICROMETERS

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DNO.1... 0.00 MICROMETERS
                                    D<sub>V0.1</sub>... 453.70 MICROMETERS
                                    D<sub>V0.5</sub>···1080.41 MICROMETERS
D<sub>NO.5</sub>... 91.30 MICROMETERS
                                                                        R.S.... 1,05
                                    DV0.9...1584.28 MICROMETERS
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DNO.9... 382.71 MICROMETERS

NUMBER MEAN DIAMETER... 169.25 MICROMETERS S.D.... 214.14

DTG 84/09/18 13:48:00

DFM=2.0--1.5 MHz

UPPER						N.C.C.I.E.	41H 1 DCD
LIMIT	N(SA4)	4/SEC	gm/SEC	<u>8_N</u>	%_VOL.	\$_ <u>N</u>	MULATED
56 89	635 1754	2.21E 06 696459	0.07 0.14	41.10 12.97	0.06 0.11	41.10 54.07	9.06
122	2706	413536	0.14	7.70	0.11	61.77	0.16 0.36
154	2314	4 378 37	0.60	8.15	0.46	69.92	0.30
187	2257	360807	0.93	6.72	0.72	76.64	1.54
219	1525	245578	1.07	4.57	0.83	81.21	2.37
2 5 2	1107	170040	1.16	3.17	0.90	84.37	3.27
284	809	122043	1.23	2.27	0.95	86.65	4.22
318	578	103810	1.49	1.93	1.15	89.59	5.37
351	484	78760	1.54	1.47	1.19	90.05	6.57
382	400	66077	1.69	1.23	1.31	91.28	7.87
414 447	365 299	62150 53190	2.05 2.22	1.16 0.99	1.58 1.72	92.43 93.42	9.45 11.17
479	257	42215	2.19	0.79	1.72	94.21	12.85
512	202	35287	2.24	0.66	1.74	94.87	14.60
545	200	32519	2.50	0.61	1.94	95.47	15.53
57ช	148	26772	2.47	0.50	1.91	95.97	13.45
611	145	25788	2.83	0.48	2.19	96.45	20.63
644	117	19521	2.52	0.36	1.95	96.81	22.58
677	114	17407	2.62	0.32	2.02	97.14	24.61
710 743	92 90	13304 15663	2.32 3.13	0.25 0.29	1.79 2.43	97.38 97.68	26.40 23.32
776	72	12651	2.89	0.29	2.24	97.91	31.06
809	62	9919	2.58	0.13	1.99	93.10	33.05
342	57	3862	2.60	0.16	2.01	93.25	35.07
875	44	6880	2.27	0.13	1.76	93.39	36.83
903	45	8238	3.05	0.15	2.36	98.54	39.19
941	48	6912	2.85	0.13	2.21	93.67	41.39
974 1007	35 27	6418 5563	2.94	0.12 0.10	2.23 2.19	93.79 93.93	43.67 45.85
1040	46	7345	4.11	0.14	3.19	99.03	40.04
1073	24	4601	2.83	0.09	2.19	99.12	51.23
1106	2 3	5411	3.65	0.10	2.33	99.22	54.05
1139	22	3501	2.59	0.17	2.00	33.23	= 5.05
1172	2.4	5603	4.52	0.10	3.50	99.39	57.55
1205	13	3040	2.67	0.06	2.03	07.44	51.52
1233 12 7 1	13 12	2875 1939	2.74 1.00	0.05 0.03	2.12 1.47	99.50 99.53	53 .73 55 .2 0
1304	10	2395	3.23	0.05	2.50	99.59	57.70
1337	9	25 38	3.17	0.05	2.45	99.53	70.15
137J	7	2244	2.91	0.04	2.25	99.63	72.40
1403	5	384	1.23	0.02	0.95	99.69	73.36
1436	10	4147	6.20	0.08	4.80	39. 7 7	73.15
1469	4	1430	2.29 0.14	0.03	1.77 0.11	99.30 99.30	79.92 30.03
1502 1535	1 4	90 967	1.77	0.00	1.37	99.82	31.40
1568	2	903	1.76	0.02	1.36	99.83	32.76
1601	2	1455	3.02	0.03	2.34	99.86	35.10
1634	0	0	0.00	0.00	0.00	99.86	35.10
1667	2	2276	5.35	0.04	4.14	99.90	39.24
1700	2	1190	2.97	0.02	2.30	99.32	91.53
1733	2	2633	6.95	0.05	5.33	99.97	96.92
1766 1799	1	1173 238	3.29 0.70	0.02 0.00	2.54 0.54	100.00 100.00	99.45 100.00
1332	0	238 0	0.70	0.00	0.00	100.00	100.00
	J				0,00	200.00	2,0.09
TOTALS		5.37E 06	129.25				

TOTAL PAW PARTICLES.... 17732/21352-- 83.05%

NU BER MENT DIAMETER... 151.91 MICROMETERS S.D.... 194.52

VOLUME MEAN DIAMETER... 358.33 MICROMETERS S.D.... 654.45

SAUTER MEAN DIAMETER... 755.33 MICROMETERS

D_{M0.1}... 0.00 MICROMETERS D_{V0.1}... 424.31 MICROMETERS D_{V0.5}...1054.01 MICROMETERS R.S.... 1.19 D_{M0.9}... 350.27 MICROMETERS D_{V0.9}...1677.47 MICROMETERS

DTG 84/09/18 09:10:00

DPM=2.0--1.5 MHz

UPPER							ULATED
LIMIT	MIRAWL	4/2EC	911/SEC	3 7	NOL.	₹_N	1 YOL.
56	671	4.07E 06	0.13	50.30	J.11	50.30	0.11
89	1080	983371	0.20	12.15	0.15	62.45	0.26
122	1279	515694	0.31	6.37	0.25	68.82	0.51
154	1473	568093	0.78	7.02	0.61	75.84	1.12
187	1121	423264	1.10	5.23	0.87	81.07	1.99
219	770	291689	1.28	3.60	1.01	84.67	2.99
252	572	234661	1.60	2.90	1.26	87.57	4.26
284	409	169117	1.70	2.09	1.34	89.66	5.60
318	277	124041	1.78	1.53	1.41	91.20	7.01
351	244	116027	2.27	1.43	1.79	92.63	8.80
382	189	86212	2.20	1.07	1.74	93.69	10.54
414	127	64937	2.14	0.80	1.69	94.50	12.23
447	iii	49099	2.05	0.61	1.62	95.10	13.85
479	123	51088	2.65	0.63	2.09	95.73	15.94
512	96	42221	2.68	0.52	2.12	96.26	18.06
545	91	35281	2.72	0.44	2.15	96.69	20.20
578	64	20879	1.93	0.26	1.52	96.95	21.73
611	81	32546	3.57	0.40	2.82	97.35	24.55
644	44	14862	1.92	0.18	1.51	97.54	26.06
677	52	21582	3.25	0.27	2.56	97.80	28.62
710	56	20064	3.49	0.25		98.05	31.38
743	53			0.19	2.76 2.37	98.24	
743 776	46	14978	3.00	0.19	2.70		33.75
809		14966	3.42 4.33		3.42	98.42	36.45
	44	16679		0.21		98.63	39.88
842	39 36	16880	4.96	0.21	3.92	98.84	43.79
875		11127	3.68		2.90	98.97	46.70
908 941	22	5194	1.92 4.68	0.06	1.52	99.04 99.18	48.21
	28	11352	4.00		3.70		51.91
974 1007	27	7918	3.63	0.10	2.87	99.27	54.78
	12 17	6031	3.06	0.07	2.42	99.35	57.20
1040		4886	2.74	0.06	2.15	99.41	59.36
1073	15	3118	1.92	0.04	1.52	99.45	60.88
1106	14	7098		0.09	3.79	99.54	64.66
1139 1172	9 13	3121	2.31	0.04	1.82	99.57	66.49
		4790	3.86	0.06	3.05	99.63	69.54
1205	9 7	4995	4.38	0.05	3.46	99.70	73.00
1238 1271	7	3420	3.26	-0.07	2.57 4.41	99.74	75.57
	7	5417	5.59			99.80	79.98
1304 1337	2	38 32	4.27	0.05	3.33	99.85	33.36
	2	335	0.40	0.00	0.32	99.36	83.67
1370	Ĵ	598	0.77	0.01	0.51	99.86	84.29
1403		0	0.00			99.35	34.29
1436 1469	1	2887 235)	4.31	0.04 0.03	3.41 3.00	39.33	37.63 90.33
	3		3.73			99.93	
1502	0	4356 0	7.46 0.00	0.05	5.39 0.00	39.93	96.53 96.53
1535 1568	1	36 6	0.72	0.00	0.56	99.33 99.33	97.15
					0.50		
1601	1	303	0.63 0.00	0.00		99.99 99.99	97.65
1634	0	0		0.00	0.00		97.65
1667	0	0	0.00	0.00	0.00	99.99	97.65
1700	0	0	0.00	0.00	0.00	99.99	97.65
1733	0	0	0.00	0.00	0.00	99.99	97.65
1766	0	0	0.00	0.00	0.00	99.99	97.65
1799	0	0	0.00	0.00	0.00	99.99	97.65
1832	0	0	0.00	0.00	0.00	99.99	97.65
1865	0	0	0.00	0.00	0.00	99.99	97.65
1898	0	0	0.00	0.00	0.00	99.99	97.65
1931	0	0	0.00	0.00	0.00	99.99	97.65
1964	1	772	2.98	0.01	2.35	100.00	100.00
1997	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		8.09E 06	126.59				

TOTAL RAW PARTICLES.... 9349/12098-- 77.28%

NUMBER MEAN DIAMETER... 128.02 MICROMETERS S.D.... 168.11

VOLUME MEAN DIAMETER... 310.40 MICROMETERS S.D.... 575.21

SAUTER MEAN DIAMETER... 669.77 MICROMETERS

D_{10.1}... 0.00 MICROMETERS D_{V0.1}... 373.69 MICROMETERS D_{V0.5}... 923.43 MICROMETERS R.S.... 1.18 D_{N0.9}... 291.55 MICROMETERS D_{V0.9}...1460.90 MICROMETERS

RD-10(D8-46), 0 Degrees, 50 mph, 30 psi, 1.5 gpm, Esteron 99 DTG 84/09/14 10:05:00

DFM=2.0--1.5 MHz

UPPER						ACCUM	ULATED
LIMIT	N(RAW)	3/SEC	gm/SEC	8 4	3 VOL.	8 N	\$ VOL.
56	160						
		483365	0.02	22.85	0.01	22.85	0.01
39	725	218216	0.04	10.32	0.03	33.16	0.04
122	1227	164293	0.10	7.77	0.07	40.93	0.11
154	1425	214597	0.29	10.14	0.21	51.07	0.33
137	1045	188037	0.49	8.89	0.35	59.96	0.68
219	613	127836	0.56	6.04	0.40	66.01	1.08
252	406	100155	0.68	4.73	0.49	70.74	1.57
284	325	81586	0.82	3.86	0.59	74.60	2.16
318	256	63705	0.92	3.01	0.66	77.61	2.82
351	187	49209	0.96	2.33	0.69	79.93	3.51
332	182	46929	1.20	2.22	0.86	82.15	4.38
414	135	33476	1.10	1.58	0.79	83.73	5.17
	157		1.67		1.20	85.62	
447		39974		1.89			6.37
479	134	33935	1.76	1.60	1.27	87.23	7.64
512	113	24698	1.57	1.17	1.13	88.40	8.77
545	91	20798	1.60	0.98	1.15	89.38	9.92
578	76	20 47 0	1.89	0.97	1.36	90.35	11.28
611	80	19152	2.10	0.91	1.51	91.25	12.80
644	64	14299	1.84	0.68	1.33	91.93	14.12
677	56	12695	1.91	0.60	1.37	92.53	15.50
710	45	9649	1.68	0.46	1.21	92.98	16.71
743	44	11290	2.26	0.53	1.63	93.52	18.34
776	42	8684	1.99	0.41	1.43	93.93	19.77
809	29	7340	1.91	0.35	1.37	94.28	21.14
842	33	8271	2.43	0.39	1.75	94.67	22.89
875	3 3	3804	2.91	0.42	2.09	95.08	24.98
908	21	4520	1.67	0.21	1.20	95.30	26.19
941	2 1	3557	3.53	0.40	2.54	95.70	28.73
974	30	7969	3.65	0.38	2.63	96.08	31.36
1007	31	8625	4.38	0.41	3.15	96.48	34.51
1040	23	7340	4.39	0.37	3.16	96.86	37.69
1073	15	4119	2.54	0.19	1.53	97.05	39.50
1106	-23	3596	5.31	0.41	4.13	97.46	43.59
1139	23	6174	4.56	0.23	3.29	97.75	45.97
1172	17	5617	4.53	0.27	3.25	93.01	50.23
1205	3	2574	2.34	0.13	1.59	93.14	51.92
1238	19	4727	4.50	0.22	3.24	93.36	55.16
1271	13	3057	3.15	0.14	2.27	93.51	57.43
1304	5	1530	1.32	0.01	1.31	93.59	53.74
	12		4.05	0.19	3.57	93.78	52.31
1337		4116	2.28	0.13	1.54	93.35	63.95
1370	5	1750					
1403	12	3340	4.55	0.15	3.35	99.02	57.30
1436	7	4259	5.36	0.20	4.53	99.22	71.33
1469	ર્ગ	2259	3.52	0.11	2.50	99.33	74.49
1502	5	2157	3.71	3.13	2.57	39.43	77.16
1 535	3	1233	2.31	0.05	1.55	09.49	73.33
1 568	5	1703	3.32	0.03	2.37	99.57	31.22
1601	2	453	0.94	0.02	0.53	99.59	31.90
1634	2	35 7	1.92	0.04	1.33	99.53	93.23
	3	1334	3.13	0.05	2.26	99.70	85.54
1667		672	1.68	0.03	1.21	99.73	36.74
1700	2			0.03	1.09	99.76	87.84
1733	1	573	1.52				
1766	1	626	1.75	0.03	1.26	99.79	89.10 91.79
1799	2	1262	3.74	0.05	2.69	99.85	
1832	0	0	0.00	0.00	0.00	99.85	91.79
1865	0	0	0.00	0.00	0.00	99.85	91.79
1393	2	3276	11.40	0.15	8.21	100.00	100.00
1931	0	0	0.00	0.00	0.90	100.00	100.00
		2.12E 06	138.83				
TOTALS		2.12E U0	130.03				

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TOTAL RAW PARTICLES.... 8016/ 9299-- 86.20%
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SAUTER MEAN DIAMETER... 917.64 MICROMETERS

	MICROMETERS MICROMETERS	DVU.51169.16 MICROMETERS	R.S	1.05
	MICROMETERS	Dun g1776.57 MICROMETERS		

AUGBER MEAN DIAMETER... 242.51 MICROMETERS 5.D.... 279.17

VOLUME MEAN DIAMETER... 500.64 MICROMETERS S.D.... 801.47

RD-10(D8-46), 45 degrees, 50 mph, 30 psi, 1.5 gpm, Esteron 99

DTG 80/09/00 11:41:00

DFM=1.0--1.5 MHz

UPPER						A C C I I	III AMED
LIMIT	N (RAW)	N/SEC	qm/SEC	8_N	% VOL.	8 N	* VOL.
56	671	2.14E 06	0.07	37.64	0.05	37.64	0.05
89	1327	526786	0.10	9.26	0.07	46.90	0.11
122	1495	488612	0.30	8.59	0.19	55.49	0.31
154	1647	590443	0.81	10.38	0.53	65.87	0.84
187	1058	404368	1.05	7.11	0.69	72.98	1.52
219	744	266788	1.17	4.69	0.76	77.67	2.29
2 5 2	542	225759	1.54	3.97	1.01	81.64	3.29
284	400	158635	1.59	2.79	1.04	84.42	4.34
318	295	112007 105339	1.61	1.97 1.85	1.05 1.35	86.39	5.39
351 382	264 229	95288	2.43	1.67	1.59	88.24	6.74 8.33
414	167	66169	2.18	1.16	1.43	89.92 91.08	9.76
447	145	66106	2.75	1.16	1.80	92.24	11.56
479	105	41807	2.17	0.73	1.42	92.98	12.98
512	125	47035	2.99	0.83	1.96	93.81	14.94
545	79	30053	2.31	0.53	1.51	94.33	16.45
578	80	31230	2.88	0.55	1.89	94.88	18.34
611	46	21765	2.39	0.38	1.56	95.27	19.90
644	46	17765	2.29	0.31	1.50	95.58	21.40
677	49	25250	3.80	0.44	2.49	96.02	23.88
710	43	18419	3.21	0.32	2.10	96.35	25.93
743	48	20423	4.09	0.36	2.68	96.70	28.65
776	42	15345	3.51	0.27	2.30	96.97	30.95
509	34	16045	4.17	0.28	2.73	97.25	33.63
342	31	15715	4.62	0.28	3.02	97.53	36.70
375	29	12938	4.29	0.23	2.81	97.76	39.51
903	31	12729	4.71	0.22	3.03	97.93	42.60
941	22	11718	4.83	0.21	3.16	93.19	45.76
974 1007	13 27	10372 15270	4.98 7.75	0.19 0.27	3.26 5.07	93.33	49.02 54.09
1040	18	3830	4.94	J.16	3.24	93.65 93.31	57.33
1073	17	9143	5.63	0.16	3.59	93.97	51.02
1105	13	9452	5.39	0.17	4.13	99.13	55.20
1139	10	4893	3.51	0.09	2.37	99.22	37.57
1172	15	11159	9.00	0.20	5.39	99.42	73.45
1235	12	3972	6.11	0.12	4.00	99.54	77.46
123J	. 7	4436	4.27	60.0	2.80	99.62	30.25
1271	7	5347	6.55	0.11	4.28	39.73	34.54
1 30 4	3	2727	3.04	0.05	1.39	99.73	36.53
1337	3	4366	5.25	0.03	3.44	99.35	33.97
1 370	2	864	1.12	0.02	0.73	99.87	90.70
1403	1	943	1.31	0.02	0.86	99.33	91.56
1436	2 1	2323	3.43	0.04	2.23	39.93	93.94
1469	1	440	0.70	0.01	0.45	99.93	94.30
1502 1535	3	360	0.62	0.01 0.00	0.40 0.00	93.94	34.70
1558	3	ე ე	0.00	0.00	0.00	93.94 99.94	94.70
1601	0	0	0.00	0.00	0.00	99.94	94.70
1634	0	0	0.00	0.00	0.00	99.94	94.70
1667	1	3446	8.10	0.06	5.30	100.00	100.00
1700	0	3446	0.00	0.00	0.00	100.00	100.00
	J			0.00	0.00	200.00	100.00
CLAICT		5.69E 06	152.77				

TOTAL RAW PARTICLES... 9947/11701-- 85.01%

NUMBER MEAN DIAMETER.. 169.59 MICROMETERS S.D... 205.76

VOLUME MEAN DIAMETER.. 371.68 MICROMETERS S.D... 622.04

SAUTER MEAN DIAMETER.. 722.16 MICROMETERS

DNO.1... 0.00 MICROMETERS DVO.1.. 413.75 MICROMETERS

DNO.5... 100.83 MICROMETERS DVO.5.. 979.86 MICROMETERS DVO.5.. 979.86 MICROMETERS DVO.9... 1333.01 MICROMETERS

DTG 84/09/05 11:04:00

DFM=1.0--1.5 MHz

UPPER						3.00111	ULATED
LINIT	N (RAW)	3/SEC	gm/SEC	8_N	%_JCV_#	8_N	% VOL.
56	567	2.71E 06	0.09	37.47	0.06	37.47	0.06
89	1294	797017	0.16	11.01	0.10	48.48	0.16
122	1477	793725	0.49	11.03	0.32	59.51	0.48
154	1334	740934 491373	1.01 1.27	10.24	0.67	69.75	1.15
137 219	869 562	350930	1.53	6.79	0.84	76.54	1.99
252	366	229064	1.56	4.85 3.16	1.01	81.38	3.00
234	284	182729	1.84	2.52	1.03	84.55 87.07	4.03 5.24
318	205	135405	1.95	1.87	1.23	88.94	6.53
351	162	117788	2.30	1.63	1.52	90.57	8.05
382	122	74638	1.91	1.03	1.25	91.60	9.31
414	124	73954	2.44	1.02	1.61	92.62	10.91
447	99	68181	2.84	0.94	1.37	93.56	12.79
479	79	52 33 5	2.71	0.72	1.79	94.29	14.53
512	83	54465	3.46	0.75	2.23	95.04	16.86
545	50	36781	2.83	0.51	1.87	95.55	13.73
5 7 8	51	45269	4.18	0.63	2.76	96.17	21.49
611	49	28651	3.14	0.40	2.07	96.57	23.56
644	38	32017	4.13	0.44	2.72	97.01	26.28
677	34	23398	3.52	0.32	2.32	97.33	28.60
710 743	28 27	21837 20049	3.80 4.01	0.30 0.28	2.51 2.55	97.64 97.91	31.11 33.76
775	13	8009	1.33	0.28	1.21	93.02	34.97
333	16	14033	3.65	0.19	2.41	93.22	37.37
342	16	13883	4.08	0.19	2.69	93.41	40.06
375	21	10592	3.50	0.15	2.31	93.56	42.37
908	11	6622	2.45	0.09	1.62	98.65	43.99
941	13	9364	3.86	0.13	2.55	98.73	46.53
974	13	10149	4.65	0.14	3.07	99.92	49.60
1007	11	7953	4.04	0.11	2.35	99.03	52.27
1040	10	10115	5.66	0.14	3.74	99.17	56.00
1073	10	6938	4.21	0.09	2.73	99.25	53.79
1105	7	6729	4.54	0.09	3.00	99.35	51.78
1139 1172	5 8	3695 5372	2.73 5.54	0.05 0.09	1.30 3.55	99.40 99.50	63.53 67.24
1275	2	935	0.82	0.01	0.54	99.51	57.73
1235	2	2391	2.28	0.01	1.50	99.55	69.23
1271	5	4339	4.47	0.06	2.95	99.51	72.23
1304	3	7003	7.81	0.10	5.15	99.70	77.33
1337	ī	3292	3.96	0.05	2.51	99.75	79.99
1370	5	9613	12.45	0.13	3.22	99.83	38.21
1403	0	0	0.00	0.00	0.00	99.83	38.21
1436	Û	ວ	0.00	0.00	0.00	99.83	83.21
1409	2	3259	5.23	0.05	3.45	93.93	91.66
1502	0	0	0.00	0.00	0.00	99.93	91.56
1535	0))	0.00	0.00	0.00	99.93	91.55
1568	0	ວ ວ	0.00	0.00	0.00 0.00	99.93 99.93	91.56 91.65
1601 1634	0	Ö	0.00	0.00	0.00	99.93	91.66
1667	ı	5 3 80	12.64	0.07	8.34	100.00	100.00
1700	٥	0	0.00	0.00	0.00	100.00	100.00
	_						
TOTALS		7.24E 06	151.58				

TOTAL RAW PARTICLES.... 8034/10126-- 79.83%

NUMBER MEAN DIAMETER... 153.37 MICROMETERS S.D.... 134.94

VOLUME HEAR DIAMETER... 342.09 MICROMETERS S.D.... 609.89

SAUTER MEAN DIAMETER... 693.53 MICROMETERS

DW0.1... 0.00 MICEOMETERS DV0.1... 396.24 MICROMETERS DV0.5... 978.41 MICROMETERS DV0.9... 339.72 MICFOMETERS DV0.9... 1452.62 MICROMETERS

RD-10(D8-46), 0 degrees, 50 mph, 30 psi, 1.5 gpm, Garlon

DTG 84/09/14 10:31:00

DFM=2.0--1.5 MHz

UPPER						ACC U	ULATED
LIHIT	J(RAW)	873EC	qm/SEC	3 1	% VOL.	8 N	%_VOL.
56	175	560663	0.02	25.51	0.01	25.51	0.01
89	755	229576	0.05	10.45	0.03	35.95	0.04
122 154	1304 1441	171326 209370	0.10 0.29	7.79 9.53	0.06 0.17	43.75 53.28	0.10 0.27
187	1117	181415	0.47	8.25	0.28	61.53	0.55
219	734	127787	0.56	5.81	0.33	67.34	0.88
252	473	98052	0.67	4.46	0.40	71.80	1.28
284 318	329 283	76463 67936	0.77 0.98	3.48 3.09	0.46 0.59	75.28 78.37	1.74 2.32
351	230	52790	1.03	2.40	0.62	80.78	2.94
382	183	4397 7	1.12	2.00	0.67	82.78	3.60
414	180	38083	1.25	1.73	0.75	84.51	4.35
44 7 479	146 111	35130 23196	1.46 1.20	1.60 1.06	0.87 0.72	36.11 87.16	5.22 5.94
512	119	26760	1.70	1.22	1.01	88.38	6.95
545	113	23357	1.80	1.06	1.07	89.44	8.02
5 7 8	83	18556	1.71 1.39	0.84 0.58	1.02	90.29	9.04
611 644	70 78	12704 17427	2.25	0.38	0.83 1.34	90.87 91.66	9.87 11.21
677	60	14396	2.16	0.66	1.29	92.31	12.50
710	51	10320	1.80	0.47	1.07	92.78	13.57
743	42	9440 9746	1.89 2.23	0.43 0.44	1.13 1.33	93.21 93.66	14.70 16.02
7 7 6 8ง9	38	7764	2.02	0.35	1.33	94.01	17.23
842	35	3199	2.41	0.37	1.43	94.33	18.66
3 7 5	28	5323	1.95	0.27	1.15	94.65	19.82
903 941	4 0 2 2	10633 6 7 16	3.94 2.77	0.49 0.31	2.34 1.55	95.13 95.44	22.16 23.91
974	27	7311	3.35	0.33	2.00	95.77	25.81
1007	25	6129	3.11	0.23	1.35	96.05	27.66
1040	19 27	3965 493ช	2.22 3.04	0.13 0.22	1.32 1.31	96.23 96.45	28.99 30.30
1073 1105	17	5306	3.58	0.24	2.13	96.45	32.93
1133	21	7735	5 .7 5	0.35	3.43	37.35	36.36
1172	18	4969	4.00	0.23	2.33	9 7. 28	33.74
1235 1233	18 21	5357 5201	4.70 4.95	0.24 0.24	2.30 2.95	97.52 97.76	41.54 44.49
1271	16	4059	4.20	0.19	2.50	97.94	46.99
1304	15	3677	4.10	0.17	2.44	33.11	49.43
1337 1370	14 7	4350 1921	5.23 2.49	0.20 0.09	3.12 1.43	93.31 93.40	52.55 54.03
1403	7	2773	3.86	0.03	2.30	93.52	55.33
1435	10	4337	6.43	0.20	3.86	93 .7 2	60.19
1459	4 3	1125	1.80 3.51	0.05	1.07 2.09	93.77	61.26 63.35
1502 1535	5	2052 3896	7.13	0.09 0.18	4.25	98.85 99.04	6 7. 60
1568	4	2434	4.85	0.11	2.89	99.15	73.49
1601	5	3204	6.66	0.15	3.97	99.30	74.45
1634	7	4590	10.15 5.90	0.21 0.11	5.05 3.52	99.51	80.50 84.02
1667 1700	5 1	2512 431	1.07	0.11	0.64	99.62 99.64	34.66
1733	3	1830	4.84	0.08	2.88	99.73	87.54
1766	0	0	0.00	0.00	0.00	99.73	87.54
1799 1332	0 2 2	502 1149	1.49 3.59	0.02 0.05	0.89 2.14	99 .75 99 . 80	38.42 90.56
1855	ō	บ้า	0.00	0.00	0.00	99.80	90.56
1350	1	2539	9.01	0.12	5.37	99.92	95.93
1531 1554	0 1	0 1770	0.00 6.83	0.00 0.03	0.00 4.07	99.92 100.00	95.93 100.00
1997	ō	0	0.00	0.00	3.00	100.00	100.00
TOTALS		2.200 06	167.38				

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TOTAL RA. PARTICLES.... 3537/ 9661-- 87.06%
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MUNBER MEAN DIAMETER... 241.21 MICROMETERS S.D.... 296.06

VOLUME MEAN DIAMETER... 526.62 MICROMETERS S.D.... 847.70

SAUTER MEAN DIAMETER...1001.46 MICHOMETERS

PH3.1...
 0.00 MICROMETERS
 PV0.1... 613.61 MICROMETERS

 PH3.5...
 143.26 MICROMETERS
 PV0.5...1309.52 MICROMETERS
 R.S.... 0.92

 PH0.9...
 566.25 MICROMETERS
 PV0.9...1322.81 MICROMETERS

DTG 84/09/17 08:48:00

DFM=2.0--1.5 MHz

UPPER						ACCUM	ULATED
LIMIT	N(RAW)	N/SEC	qm/SEC	8 N	% VOL.	% N	% VOL.
56	290	800484	0.03	24.79	0.02	24.79	0.02
89	1031	357870	0.07	11.08	0.06	35.87	0.02
122	1783	268270	0.16	8.31	0.15	44.17	0.24
154	2137	392878	0.54	12.16	0.49	56.34	0.72
187	1680	319216	0.83	9.88	0.75	66.22	1.47
219	1081	218032	0.95	6.75	0.86	72.97	2.34
2 52	812	163651	1.11	5.07	1.01	78.04	3.35
284	560	111305	1.12	3.45	1.01	81.49	4.36
318	462	88043	1.27	2.73	1.15	84.21	5.51
351	339	67966	1.33	2.10	1.21	86.32	6.71
382	270	51828	1.32	1.60	1.20	87.92	7.91
414	2 3 3	45130	1.49	1.40	1.35	89.32	9.26
447	222	42813	1.78	1.33	1.62	90.65	10.88
479	170	30641	1.59	0.95	1.44	91.59	12.32
512	164	32455	2.06	1.00	1.87	92.60	14.19
545	112	20991	1.62	0.65	1.47	93.25	15.65
578	101	22851	2.11	0.71	1.91	93.96	17.57
611	96	18626	2.04	0.58	1.85	94.53	19.42
644	92	16702	2.15	0.52	1.95	95.05	21.37
677	74	14635	2.20	0.45	2.00	95.50	23.37
710	66	1 38 30	2.41	0.43	2.18	95.93	25.55
743	61	14648	2.93	0.45	2.66	96.39	28.21
776	49	8408	1.92	0.26	1.74	96.65	29.95
809	5.5	11320	2.94	0.35	2.67	97.00	32.62
842	37	7535	2.21	0.23	2.01	97.23	34.62
875	44	9581	3.16	0.30	2.87	97.53	37.49
908	2 7 3 2	4654 6733	1.72	0.14	1.56 2.52	97.67	39.05 41.57
941 974	34	7150	2.78 3.28	0.21 0.22	2.97	97.88 98.10	44.54
1007	32	8269	4.20	0.26	3.80	98.36	48.35
1040	26	6021	3.37	0.19	3.06	98.54	51.40
1073	21	6640	4.09	0.21	3.71	98.75	55.11
1105	11	2063	1.39	0.06	1.26	98.81	56.37
1139	16	2640	1.95	0.08	1.77	98.89	59.14
1172	11	3500	2.82	0.11	2.56	99.00	60.70
1205	16	5022	4.40	0.16	3.99	99.16	64.69
1238	5	740	0.70	0.02	0.64	99.18	65.33
1271	11	4091	4.22	0.13	3.93	99.31	69.16
1304	3	6 3 7	0.71	0.02	0.64	99.33	69.80
1337	13	4112	4.95	0.13	4.48	99.45	74.28
1370	6	4344	5.63	0.13	5.10	99.59	79.38
1403	5	2566	3.57	0.03	3.24	99.67	82.62
1436	2	1473	2.20	0.05	1.99	99.71	84.62
1469	2	750	1.20	0.02	1.09	99.74	85.71
1502	4	2783	4.77	0.09	4.32	99.82	90.03
1535	3	1944	3.56	0.06	3.22	99.88	93.25
1568	3	3090	6.03	0.10	5.47	99.98	98.72
1601	1	679	1.41	0.02	1.28	100.00	100.00
1634	0	0	0.00	0.00	0.00	100.00	100.00
TOTAL C		2 220 06	110 30				
TOTALS		3.23E 06	110.30				

TOTAL RAW PARTICLES.... 12305/14650-- 83.99%

NUMBER MEAN DIAMETER... 197.75 MICROMETERS S.D.... 218.38

VOLUME MEAN DIAMETER... 402.70 MICROMETERS S.D.... 668.27

SAUTER MEAN DIAMETER... 752.38 MICROMETERS

DTG 84/09/17 15:43:00

DPM=2.0--1.5 MHz

LIMIT M(RAW) N/SEC Sm/SEC Sm/	UPPER						ACCU!	ULATED
89 920 412732 0.08 11.69 0.08 45.99 0.12 122 1389 260884 0.16 7.39 0.16 53.38 0.28 154 1628 324810 0.44 9.20 0.45 62.58 0.73 187 1334 264906 0.69 7.51 0.69 70.09 1.42 219 947 200179 0.88 5.67 0.89 75.76 2.30 2552 614 145177 0.99 4.11 0.99 79.88 3.29 284 474 105371 1.06 2.99 1.06 82.86 4.35 318 349 81629 1.17 2.31 1.18 85.17 5.53 318 349 81629 1.17 2.31 1.18 85.17 5.53 318 239 56312 1.44 1.60 1.48 85.79 8.24 414 163 40277 <		B(RAW)	N/SEC	gm/SEC	8 7	& VOL.		
122								
154 1628 324810 0.44 9.20 0.45 62.58 0.73 187 1334 264906 0.69 7.51 0.69 70.09 1.42 219 947 200179 0.88 5.67 0.89 75.76 2.30 252 614 145177 0.99 4.11 0.99 79.88 3.29 284 474 105371 1.06 2.99 1.06 82.86 4.35 318 349 81629 1.17 2.31 1.18 85.17 5.53 382 239 56312 1.44 1.60 1.44 88.59 8.24 414 163 40277 1.33 1.14 1.33 89.73 9.57 447 128 33406 1.73 0.95 1.74 91.68 12.79 512 113 30876 1.96 0.87 1.97 92.55 14.76 545 113 29742 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>								
187								
219 947 200179 0.88 5.67 0.88 75.76 2.30								
252 614 145177 0.99 4.11 0.99 79.88 3.29 234 474 105371 1.06 2.99 1.06 82.86 4.35 318 349 81629 1.17 2.31 1.18 85.17 5.53 351 256 64254 1.26 1.82 1.26 87.00 6.79 382 239 56312 1.44 1.60 1.44 88.559 8.24 414 163 40277 1.33 1.14 1.33 89.73 9.57 447 144 35311 1.47 1.00 1.48 90.73 11.05 479 128 33406 1.73 0.95 1.74 91.68 12.79 512 113 30876 1.96 0.87 1.97 92.55 14.76 545 113 29742 2.29 0.84 2.30 93.40 17.06 578 87 25858 2.39 0.73 2.40 94.13 19.45 611 74 22397 2.46 0.63 2.47 94.76 21.92 644 69 20117 2.59 0.57 2.60 95.33 24.52 677 64 17109 2.57 0.48 2.58 95.82 27.11 710 58 12030 2.09 0.34 2.10 96.16 29.21 743 59 19013 3.81 0.54 3.82 96.70 33.03 776 49 15738 3.60 0.45 3.61 97.14 36.65 809 36 9764 2.54 0.28 2.55 97.42 39.19 842 36 8867 2.52 0.24 2.33 97.66 41.72 842 36 8867 2.52 0.24 2.33 97.66 41.72 941 15 4395 1.81 0.12 1.82 98.26 49.44 974 16 4323 1.98 0.12 1.99 98.38 51.43 1007 21 5378 2.73 0.15 2.74 98.53 54.17 1040 20 6016 3.77 0.17 3.33 98.70 57.55 1073 22 9136 5.63 0.26 5.65 98.96 63.20 1106 21 5795 3.91 0.12 1.82 98.26 49.44 1233 10 3419 3.25 0.05 2.79 0.93 3.99 3.57 2.97 1172 9 3334 3.09 0.11 3.13 0.94 675.07 110 12 1.578 2.79 0.57 2.59 0.59 3.99 3.38 51.43 1007 21 5378 2.73 0.15 2.74 98.53 54.17 1040 20 6016 3.77 0.17 3.33 98.70 57.55 1073 22 9136 5.63 0.26 5.65 98.96 63.20 1106 21 5795 3.91 0.16 3.39 99.35 72.97 1172 9 3344 3.09 0.11 3.13 0.9.46 75.07 1172 9 3344 3.09 0.11 3.13 0.9.46 75.07 1173 22 9136 5.63 0.26 5.65 98.96 63.20 1106 21 5795 3.91 0.16 3.93 99.35 72.97 1172 9 3344 3.09 0.11 3.13 0.9.46 75.07 1173 22 9136 5.63 0.26 5.65 98.96 63.20 1106 21 5795 3.91 0.16 3.27 99.53 73.44 1233 10 3419 3.26 0.10 3.27 99.53 73.44 1233 10 3419 3.26 0.10 3.27 99.53 73.44 1233 10 3419 3.26 0.10 3.27 99.53 73.44 1233 10 3419 3.26 0.10 3.27 99.53 73.44 1233 10 3419 3.26 0.00 0.00 0.00 99.95 96.04 1535 0 0 0 0.00 0.00 0.00 0.00 99.95 96.04 1535 0 0 0 0.00 0.00 0.00 0.00 99.95 96.04 1535 0 0 0 0.00 0.00 0.00 0.00 99.95 96.04 1535 0 0 0 0.00 0.00 0.00 0.00 99.95 96.04 1536 1 120 0.00 0.00 0.00 0.00 0.00 0.00 0.0								
234								
318 349 81629 1.17 2.31 1.18 85.17 5.53 351 256 64254 1.26 1.82 1.26 87.00 6.79 322 239 56312 1.44 1.60 1.44 88.59 8.24 414 163 40277 1.33 1.14 1.33 89.73 9.57 447 144 35311 1.47 1.00 1.48 90.73 11.05 479 128 33406 1.73 0.95 1.74 91.68 12.79 512 113 30876 1.96 0.87 1.97 92.55 14.76 545 113 29742 2.29 0.84 2.30 93.40 17.06 578 87 25858 2.39 0.73 2.40 94.13 19.45 611 74 22397 2.46 0.63 2.47 94.76 21.92 644 69 20117 2.59 0.57 2.60 95.33 24.52 677 64 17109 2.57 0.48 2.58 95.82 27.11 710 58 12030 2.09 0.34 2.10 96.16 29.21 743 59 19013 3.81 0.54 3.82 96.70 33.03 776 49 15738 3.60 0.45 3.61 97.14 36.65 809 36 9764 2.54 0.28 2.55 97.42 39.19 842 36 8567 2.52 0.24 2.53 97.66 41.72 908 29 9759 3.61 0.28 3.63 98.13 47.62 941 15 4395 1.81 0.12 1.82 98.26 49.44 107 21 5378 2.73 0.15 2.74 98.53 54.17 1040 20 6016 3.37 0.17 3.38 98.70 57.55 1073 22 9136 5.63 0.26 5.65 98.96 63.20 1106 21 5795 3.91 0.16 3.93 99.75 77.57 1205 10 2690 2.36 0.03 2.37 99.53 78.44 1207 21 5378 2.73 0.15 2.74 98.53 54.17 1217 8 2707 2.79 0.03 2.30 99.75 37.44 1233 10 3419 3.26 0.10 3.27 99.53 31.71 1271 8 2707 2.79 0.00 2.30 99.75 90.69 1436 4 2168 3.24 0.06 3.25 99.91 93.95 1469 2 1300 0.00 0.00 0.00 99.95 96.04 1535 0 0 0.00 0.00 0.00 99.95 96.04 1536 1 22 22 22 22 22 22 22								
351 256 64254 1.26 1.82 1.26 87.00 6.79 382 239 56312 1.44 1.60 1.44 88.59 8.24 414 163 40277 1.33 1.14 1.33 89.73 9.57 447 144 35311 1.47 1.00 1.48 90.73 11.05 479 128 33406 1.73 0.95 1.74 91.68 12.79 512 113 30876 1.96 0.87 1.97 92.55 14.76 545 113 29742 2.29 0.84 2.30 93.40 17.06 578 87 25858 2.39 0.73 2.40 94.13 19.45 611 74 22397 2.46 0.63 2.47 94.76 21.92 644 69 20117 2.59 0.57 2.60 95.33 24.52 677 64 17109 2.57 0.48 2.58 95.82 27.11 710 58 12030 2.09 0.34 2.10 96.16 29.21 743 59 19013 3.81 0.54 3.82 96.70 33.03 776 49 15738 3.60 0.45 3.61 97.14 36.65 809 36 9764 2.54 0.28 2.55 97.42 39.19 842 36 8567 2.52 0.24 2.53 97.66 41.72 875 27 6845 2.26 0.19 2.27 97.86 43.99 908 29 9759 3.61 0.28 3.63 98.13 47.62 941 15 4395 1.81 0.12 1.82 98.26 49.44 974 16 4328 1.98 0.12 1.99 93.38 51.43 1007 21 5378 2.73 0.15 2.74 98.53 54.17 1040 20 6016 3.37 0.17 3.39 98.70 57.55 1073 22 9136 5.63 0.26 5.65 98.96 63.20 1106 21 5795 3.91 0.16 3.33 99.35 72.97 1172 9 3334 3.09 0.11 3.10 3.99.70 57.55 1073 22 9136 5.63 0.26 5.65 98.96 63.20 1106 21 5795 3.91 0.16 3.33 99.35 72.97 1172 9 3344 3.09 0.11 3.10 39.46 75.07 1271 8 2707 2.79 0.03 2.30 39.71 34.51 1271 8 2707 2.99 0.93 2.30 39.71 34.51 1337 4 1068 1.28 0.03 1.29 99.95 30.69 1436 4 2168 3.24 0.06 3.25 99.91 33.95 1403 0 0 0.00 0.00 0.00 99.95 96.04 1535 0 0 0.00 0.00 0.00 99.95 96.04 1535 0 0 0.00 0.00 0.00 99.95 96.04 1536 1 1 22 0.24 0.00 0.24 99.95 96.04 1536 1 1 861 2.02 0.02 2.03 100.00 100.00								
382 239 56312 1.44 1.60 1.44 88,59 8.24 414 163 40277 1.33 1.14 1.30 89,73 9.57 447 144 35311 1.47 1.00 1.48 90,73 11.05 512 113 30876 1.96 0.87 1.97 92,55 14.76 545 113 29742 2.29 0.84 2.30 93.40 17.06 578 87 25858 2.39 0.73 2.40 94.13 19.45 611 74 22397 2.46 0.63 2.47 94.76 21.92 644 69 20117 2.59 0.57 2.60 95.33 24.52 677 64 17109 2.57 0.48 2.58 95.82 27.11 710 58 12030 2.09 0.34 2.10 96.16 29.21 743 59 19013 3.81 </td <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	-							
414 163 40277 1.33 1.14 1.33 89.73 9.57 447 144 35311 1.47 1.00 1.48 90.73 11.05 479 128 33406 1.73 0.95 1.74 91.68 12.79 512 113 30876 1.96 0.87 1.97 92.55 14.76 578 87 25858 2.39 0.73 2.40 94.13 19.45 611 74 22397 2.46 0.63 2.47 94.76 21.92 677 64 17109 2.59 0.57 2.60 95.33 24.52 677 64 17109 2.57 0.48 2.58 95.82 27.11 710 58 12030 2.09 0.34 2.10 96.16 29.21 743 59 19013 3.81 0.54 3.82 96.70 33.03 776 49 15738 3.60 0.45 3.61 97.14 36.65 809 36 8567 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
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479 128 33406 1.73 0.95 1.74 91.68 12.79 512 113 30876 1.96 0.87 1.97 92.55 14.76 545 113 29742 2.29 0.84 2.30 93.40 17.06 578 87 25858 2.39 0.73 2.40 94.13 19.45 611 74 22397 2.46 0.63 2.47 94.76 21.92 644 69 20117 2.59 0.57 2.60 95.33 24.52 677 64 17109 2.57 0.48 2.58 95.82 27.11 710 58 12030 2.09 0.34 2.10 96.16 29.21 743 59 19013 3.81 0.54 3.82 96.70 33.03 776 49 15738 3.60 0.45 3.61 97.14 39.19 842 36 8567 2.52 0.24 2.53 97.66 41.72 875 27 6845 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
512 113 30876 1.96 0.87 1.97 92.55 14.76 545 113 29742 2.29 0.84 2.30 93.40 17.06 578 87 25858 2.39 0.73 2.40 94.13 19.45 611 74 22397 2.46 0.63 2.47 94.76 21.92 644 69 20117 2.59 0.57 2.60 95.33 24.52 677 64 17109 2.57 0.48 2.58 95.82 27.11 710 58 12030 2.09 0.34 2.10 96.16 29.21 743 59 19013 3.81 0.54 3.82 96.70 33.03 776 49 15738 3.60 0.45 3.61 97.14 36.65 809 36 8567 2.52 0.24 2.53 97.66 41.72 875 27 6845 2.26								
545 113 29742 2.29 0.84 2.30 93.40 17.06 578 87 25858 2.39 0.73 2.40 94.13 19.45 641 74 22397 2.46 0.63 2.47 94.76 21.92 644 69 20117 2.59 0.57 2.60 95.33 24.52 677 64 17109 2.57 0.48 2.58 95.82 27.11 710 58 12030 2.09 0.34 2.10 96.16 29.21 743 59 19013 3.81 0.54 3.82 96.70 33.03 776 49 15738 3.60 0.45 3.61 97.14 36.65 809 36 9764 2.54 0.28 2.55 97.42 39.19 842 36 8567 2.52 0.24 2.53 97.66 41.72 875 27 6845 2.26								
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	TOTALS		3.535 05	99.58				

TOTAL RAW PARTICLES.... 10028/12308-- 81.48%

NUMBER MEAN DIAMETER... 179.10 MICROMETERS S.D.... 210.03

VOLUME MEAN DIAMETER... 377.85 MICROMETERS S.D.... 620.02

SAUTER MEAN DIAMETER... 708.07 MICROMETERS

D_{M0.1}... 0.00 MICROMETERS D_{V0.1}... 423.96 MICROMETERS D_{V0.5}... 949.82 MICROMETERS R.S.... 0.99 D_{V0.9}... 423.16 MICROMETERS D_{V0.9}... 1361.79 MICROMETERS

DPM=2.0--1.5 MHz

Imper							
UPPER LIMIT	N (RAW)	N/SEC	qm/SEC	9 N	s uni		ULATED
				# W	VOL.	<u>N</u> N	VOL.
56	266	736794	0.02	36.72	0.02	36.72	0.02
89 122	785 1208	252254 151011	0.05	12.57	0.04	49.29	0.07
154	1458	182866	0.09 0.25	7.53 9.11	0.08 0.22	56.82	0.15
187	1221	109741	0.28	5.47	0.25	65.93 71.40	0.37
219	858	112773	0.49	5.62	0.44	77.02	1.06
252	645	74966	0.51	3.74	0.45	80.75	1.52
284	475	59125	0.59	2.95	0.53	83.70	2.04
318	397	40770	0.59	2.03	0.52	85.73	2.56
351	301	33062	0.65	1.65	0.58	87.38	3.14
382	252	33569	0.86	1.67	0.76	89.05	3.90
414	186	26657	0.88	1.33	0.78	90.38	4.68
447	160	17236	0.72	0.86	0.64	91.24	5.32
479	134	10278	0.53	0.51	0.47	91.75	5.80
512	110	10652	0.68	0.53	0.60	92.28	6.40
545	109 99	20153 9129	1.55 0.84	1.00 0.45	1.38 0.75	93.29 93.74	7.78 8.53
578 611	96	9390	1.03	0.47	0.73	94.21	9.44
644	76	8139	1.05	0.41	0.93	94.62	10.37
677	48	6824	1.03	0.34	0.91	94.96	11.29
710	58	5657	0.98	0.28	0.88	95.24	12.16
743	50	5762	1.15	0.29	1.03	95.52	13.19
776	66	5104	1.17	0.25	1.04	95.78	14.23
809	34	4683	1.22	0.23	1.08	96.01	15.31
842	41	5130	1.51	0.26	1.34	96.27	16.65
875	40	3779	1.25	0.19	1.11	96.46	17.76
908	31	10640	3.94	0.53	3.50	96.99	21.26
941 974	22 23	3099 2407	1.28 1.10	0.15 0.12	1.14	97.14 97.26	22.39 23.38
1007	21	1120	0.57	0.06	0.51	97.32	23.88
1040	23	3781	2.12	0.19	1.88	97.51	25.76
1073	15	656	0.40	0.03	0.36	97.54	26.12
1106	19	2450	1.66	0.12	1.47	97.66	27.60
1139	15	4296	3.17	9.21	2.82	97.87	30.42
1172	12	1 30 5	1.05	0.07	0.94	97.94	31.35
1205	12	1415	1.24	0.07	1.10	93.01	32.46
1238	18	4249	4.05	0.21	3.60	98.22	36.05
1271	8 9	1034 3099	1.07 3.46	0.05 0.15	0.95 3.07	98.27 98.43	37.00 40.07
1304 1337	9	899	1.08	0.04	0.96	93.47	41.04
1370	12	1895	2.46	0.09	2.18	98.57	43.22
1403	-4	2253	3.14	0.11	2.79	99.68	46.01
1436	9	98 1	1.47	0.05	1.30	98.73	47.31
1469	10	3104	4.97	0.15	4.42	98.88	51.73
1502	4	944	1.62	0.05	1.44	99.93	53.17
1535	6	2098	3.84	0.10	3.41	99.03	56.58
1568	3 5	1063 584	2.07 1.21	0.05	1.34 1.03	99.09 99.12	59.42 59.50
1601 1634	7	6145	13.59	0.31	12.08	99.42	71.59
1667	8	1631	3.83	0.08	3.41	99.50	75.00
1700	4	3329	8.30	0.17	7.38	99.67	82.38
1733	6	3361	8.88	0.17	7.90	99.84	90.28
1766	2	88	0.25	0.00	0.22	99.84	90.50
1799	1	78	0.23	0.00	0.20	99.85	90.70
1832	1	55	0.17	0.00	0.15	99.85	90.85
1865	2 2	2628 248	8.68 0.86	0.13	7.71 0.77	99.98	98.57
1898	0	240	0.00	0.01	0.00	99.99	99.34 99.34
1931 1964	0	ŏ	0.00	0.00	0.00	99.99	99.34
1997	ŏ	ŏ	0.00	0.00	0.00	99.99	99.34
2030	ì	175	0.75	0.01	0.66	100.00	100.00
2063	Ō	0	0.00	0.00	0.00	100.00	100.00
TOTALS		2.01E 06	112.46				
101705							

TOTAL RAW PARTICLES... 9497/10759-- 88.27%

NUMBER MEAN DIAMETER... 185.87 MICROMETERS S.D... 262.89

VOLUME MEAN DIAMETER... 474.99 MICROMETERS S.D.... 822.59

SAUTER MEAN DIAMETER...1033.74 MICROMETERS

DNO.1... 0.00 MICROMETERS DV0.1... 630.25 MICROMETERS DV0.5...1455.57 MICROMETERS PV0.5...1455.57 MICROMETERS DV0.9... 1731.34 MICROMETERS

RD-10(D8-46), 45 degrees, 50 mph, 30 psi, 1.5 gpm, Roundup DrG 84/09/18 14:10:00

DF.1=2.0--1.5 MHz

UPPLK						ACCIP	ULATED
LIAIT	4(BAu)	4/3EC	47/SEC	8 7	%_VOL.	₹_Ŋ	₹ VOL.
56	365	1.450 06	0.05	48.60	0.05	43.60	0.05
89	813	363293	0.03	12.16	0.03	60.76	0.03
122	1178	207220	0.13	6.94	0.13	67.69	0.24
154	1204	214581	0.29	7.18	0.29	74.83	0.54
137	947	161934	0.42	5.42	0.42	80.30	0.95
219	617	108588	0.47	3.63	0.47	33.93	1.42
252	477	77534	0.53	2.59	0.52	86.53	1.95
284	322	54187	0.54	1.81	0.54	88.34	2.49
318	301	53269	0.77	1.78	0.76	90.12	3.25
351	202	36028	0.70	1.21	0.70	91.33	3.95
38 2	168	27008	0.69	0.90	0.69	92.23	4.64
414	147	23496	0.77	0.79	0.77	93.02	5.40
447	118	19646	0.82	0.66	0.81	93.68	6.22
479 512	102 77	15292 14589	0.79 0.93	0.51 0.49	0.79 0.92	94.19 94.68	7.01 7.93
545	68	13197	1.02	0.44	1.01	95.12	8.94
578	84	14928	1.38	0.50	1.37	95.62	10.31
611	66	12506	1.37	0.42	1.36	96.04	11.67
644	52	9239	1.19	0.31	1.18	96.34	12.85
67 7	48	7813	1.17	0.26	1.17	96.61	14.02
710	39	6673	1.16	0.22	1.15	96.83	15.17
743	42	6514	1.30	0.22	1.30	97.05	16.47
776	25	5862	1.34	0.20	1.33	97.24	17.30
309	38	6796	1.77	0.23	1.75	97.47	19.55
342	28	5141	1.51	0.17	1.50	97.54	21.05
კ 75	22 23	4 92 9 4 7 0 9	1.53 1.74	0.16 0.13	1.52 1.73	97.31 97.97	22.57 24.40
903 941	23	4459	1.84	0.15	1.83	93.11	25.23
974	24	4739	2.20	0.16	2.13	93.23	23.41
1307	15	3039	1.57	0.10	1.56	98.33	23.97
1040	15	3976	2.23	0.13	2.21	99.51	32.19
1073	7	1514	0.93	0.05	0.93	93.55	33.11
1105	12	2433	1.58	0.03	1.37	93.55	34.73
1137	12	3511	2.50	0.12	2.53	03.75	37.35
1172	14	4047	3.25	0.14	3.21	23.93	40.59
1205	, <u>i</u>	1035	0.91	0.03	0.90	73.73	41.50
123.	11	4115	3.92	0.14	3.37	39.07	45.39
12 7 1 1304	2 5	254 1116	0.26 1.24	0.01 0.04	0.25 1.24	99.03 99.12	45.65 45.03
1337	5	3346	4.03	0.11	4.00	29.23	50.33
1370	10	3319	4.95	0.13	4.92	99.35	55.35
1403	5	236	1.23	0.03	1.23	99.39	57.03
1436	ပ်	152 7	2.23	0.05	2.27	93.44	59.29
1469	4	1257	2.03	0.04	2.02	99.43	51.31
1532	3	1039	1.87	0.04	1.85	99.52	63.16
1535	3	1725	3.16	0.05	3.14	99.57	66.30
1563	5	1689	3.30	0.06	3.27	99.63	69.57
1601	2 2	530	1.10	0.02	1.10	99.65	70.67
1634		921	2.04 1.86	0.03	2.02 1.85	99.68 99.71	72.69 7 4. 54
1667 1700	3 0	7 9 3 0	0.00	0.00	0.00	99.71	74.54
1733	3	1943	5.13	0.07	5.10	99.77	79.64
1736	2	3936	11.01	0.13	19.94	99.90	90.59
1799	ī	395	1.17	0.01	1.15	99.92	91.75
1332	2	1824	5.70	0.95	5.67	99.93	97.41
1865	0	0	0.00	0.00	0.00	99.93	97.41
1898	0	0	0.00	0.00	3.00	99.93	97.41
1931	1	710	2.60	0.02	2.59	100.00	100.00
1964	0	<u>0</u>	0.00	0.00	0.00	100.00	100.00
TOTALS		2.99€ 06	100.64				

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TOTAL RAW PARTICLES.... 7797/ 9167-- 65.03%
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SAUTER MEAN DIAMETER... 945.64 MICROMETERS

R.S.... 0.90

NUMBER MEAN DIAMETER... 144.29 MICROMETERS S.D.... 217.46

VOLUME MEAN DIAMETER... 400.84 MICROMETERS S.D.... 743.48

RD-10(D8-46), 90 degrees, 50 mph, 30 psi, 1.5 gpm, Roundup DFG 80/09/08 09:24:00

DFM=2.0--1.5 M.Iz

UPPCR						ACCU	IULATED
LIMIT	H(RAW)	MISEC	qm/SEC	8 19	% VOL.	<u> 8 N</u>	%_VOL.
56	463	2.28E 06	0.08	51.30	0.07	51.30	0.07
89	794	53 98 22	0.11	12.14	0.10	63.43	0.17
122	1043	297559	0.18	6.69	0.17	70.12	0.34
154	1001	296251	0.41	6.66	0.38	76.78	0.72
187	802	236247	0.61	5.31	0.57	82.09	1.30
219	553	157381	0.69	3.54	0.65	85.63	1.94
252	394	102399	0.70	2.30	0.66	87.93	2.60
284	317	7984 4	0.80	1.79	0.75	89.73	3.35
318	205	55086	0.79	1.24	0.74	90.96	4.09
351	189	53551	1.05	1.20	0.98	92.17	5.08
382	153	39071	1.00	0.88	0.94	93.05	6.02
414	123	30439	1.00	0.68	0.94	93.73	6.96
447	88	25919	1.08	0.58	1.01	94.31	7.97
479	80	20743	1.03	0.47	1.01	94.78	8.93
512 545	76 74	17772 18146	1.13 1.40	0.40 0.41	1.06 1.31	95.18 95.59	10.04
573	57	14211	1.40	0.32	1.23	95.91	11.35 12.59
611	54	16099	1.76	0.36	1.66	96.27	14.24
644	51	14451	1.86	0.32	1.75	96.59	15.99
677	46	16691	2.51	0.38	2.36	96.97	18.35
710	30	8992	1.57	0.20	1.47	97.17	19.82
743	28	7538	1.51	0.17	1.42	97.34	21.24
776	32	8219	1.88	0.18	1.77	97.53	23.00
909	3 5	10261	2.67	0.23	2.50	97.76	25.51
842	22	7107	2.09	0.16	1.96	97.92	27.47
875	22	5413	1.79	0.12	1.68	98.04	29.15
908	17	8167	3.02	0.18	2.84	98.22	31.98
941	19	6839	2.82	0.15	2.65	93.37	34.63
974	17	8317	3.81	0.19	3.58	98.56	38.22
1007	14	7018	3.56	0.16	3.34	93.72	41.56
1040	18	5541	3.10	0.12	2.91	93.84	44.47
1073	14	8293	5.11	0.19	4.80	99.03	49.27
1106	9	3294	2.22 1.53	0.07	2.03	99.10	51.35
1139 1172	9 8	2201 5100	4.11	0.95 9.11	1.53 3.35	99.15 99.27	52.83 56.74
1205	3	2891	2.54	0.03	2.33	99.33	59.12
1233	5	1012	0.95	0.02	0.30	29.36	59.03
1271	10	3544	3.55	0.03	3.43	79.44	63.45
130;	5	2053	2.29	0.05	2.15	99.43	55.51
1337	ં	2314	3.38	0.05	3.13	22.55	53.79
1370	3	2542	3.29	0.05	3.09	39.50	71.89
1403	7	5 7 03	9.34	0.15	3.77	99.75	30.65
1436	3	347	0.52	0.01	0.49	99.76	31.14
1459	3	2117	3.39	0.05	3.13	99.31	34.33
1502	3	2737	4.77	0.05	4.43	99.37	33.31
1535	3	1295	2.37	0.03	2.23	39.90	91.04
1553	4	2755	5.38	0.03	5.05	99.95	95.09
1601	0	0	0.00	0.00	0.00	99.96	95.09
1634	1	144	0.32	0.00	0.30	99.97	96.39 96.39
1667	U 2	1544		0.00		99.97 100.00	
1700 1 73 3	2 0	1544 0	3.85 0.00	0.00			
	U			0.00	0.00	100.00	100.00
TOTALS		4.45E 06	106.47				
TOTAL	RAW PART	ICLES	6915/85	30 81.	07%		
NUMBER	MEAN DI	AMETER 1	33.47 MIC	ROMETERS	S.D	. 195.46	

VOLUME MEAN DIAMETER ... 357.69 MICROMETERS S.D.... 646.35

SAUTER MEAN DIAMETER... 816.94 MICROMETERS

Dv0.1... 511.01 AICROAETERS DNO.1... 0.00 MICROMETERS D_{V0.5}...1034.04 MICROMETERS D_{V0.9}...1519.14 MICROMETERS D_{N0.5}... 0.00 MICROMETERS R.S.... 0.93 DNO.9... 291.60 MICROMETERS

Nozzle RD10 (010-45)

O degrees
30 psi
50 mph
.94 gpm
10% SIM. AATREX
90% WATER Angle to Airstream Spray Pressure Airspeed Flow Rate Tank Mix

FILE: C:\PMS\DATA\073186.003 Number of Tests Combined: 2

Slice Rate 1.5 MHz AVG 100 DFM 1 cm. BAR 1.5 BAR 1.5
Distance to Probe 46 cm.
Sample Interval 240 sec.
Number of Samples 1
Number of Scans 6
Scan Spacing 6 cm.
Scan Length 40 cm.

Number	of Tests	Combined: :	2	Scan	Length	40	cm.
UPPER LIMIT	N(RAW)	N/SEC	Gm/SEC	7. N	% VOL.	ACCUI	MULATED % VOL.
LIMIT		1.37E+06 344758 312738 297865 186900 134302 116678 94404 88324 62793 61365 48803 44508 41007 32853 23541 21731 17855 16703 16435 11787 12185 10754 13472 8379 9002 9741 6193 9144 3868 5233 8034 4562 6705 8470 4892 4376 4662 3711 4681	0.019148995733715399118575697332447237035521.0700000000000000000000000000000000000	38.80 9.89	0.03 0.04 0.12 0.25 0.30 0.57 0.59 0.77 0.78 1.00 1.16 1.33 1.30 1.13 1.25 1.36 1.34 1.54 1.74 1.66 2.47 1.73	% 800 800 800 800 800 800 81.08 81.59	% VOL 0.03 0.19 0.44 0.75 1.11 1.61 2.20 2.99 3.76 4.74 5.74 6.90 8.23 9.55 11.92 13.28 14.62 16.53 10.66 22.48 28.61 28.61 28.65 28.61 28.67 28.66 29.66 20.65 20.66 20.75 20.75 2
	1.19E+04 ACCEPTED	3.52E+06 RAW PARTICLE		IMAGES =	11942/	13900 =	85.9%
	MEAN DIA		188.01 µm				
VOLUME	MEAN DIA	= U _{ZD}	443.12 µm 890.39 µm				

32.... 890.3

D_{N.1}... (56 μm
NUMBER MEDIAN DIA.≘0N.5... 94.13 μm
N.9... 453.23 μm RELATIVE SPAN = 0.94

UV.1... 525.39 µm

VOLUME MEDIAN DIA.≈DV.5...1185.56 µm

DV.9...1643.23 µm

R010 (010-45) Nozzle D degrees
3D psi
5D mph
.94 gpm
5% SIM.ESTERON 990 Angle to Airstream Spray Pressure Airspeed Flow Rate Tank Mix 95% WATER

Slice Rate 1.5 MHz AVG 100 OFM 1 cm. 1.5 BAR Distance to Probe 46 cm. Sample Interval 240 sec. Number of Samples 1 Number of Scans 6 cm. Scan Spacing Scan Length 40 cm.

FILE:	C:\F	MS\DA	TA\080186.0	306
Number	o f	Tests	Combined:	2

148111061	2. 163C3 C		•	Scall Length		40	Cm.
UPPER LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	ACCUI % N 	MULATED % VOL.
LIMIT	N(RAW)	N/SEC		% N 34.45 9.29 8.91 8.51 6.36 4.65 3.76 3.27 2.62 2.17 1.71 1.69 1.27 1.10 C.72 0.74 0.71 0.55 0.53 0.44 0.52 0.40 0.52 0.40 0.52 0.28 0.29 0.20 0.22 0.25 0.19	7. VOL 0.03 0.04 0.13 0.28 0.39 0.49 0.61 0.79 0.90 1.05 1.33 1.40 1.58 1.67 1.35 1.64 1.69 1.82 2.18 2.18 2.14 2.53 2.18 2.14 2.53 2.18 2.18	ACCUI	MULATED % VOL. 0.03 0.07 0.20 0.48 0.87 1.36 1.36 4.68 5.73 7.06 4.68 5.73 7.06 4.69 10.04 11.71 13.04 11.71 13.04 21.95 24.46 26.63 28.79 31.25 33.49 36.01 38.04 40.47 43.47 46.06
1073 1106 1139 1172 1205 1238	34 26 23 20 21 20	6639 5809 5755 4908 4868 4732	4.09 3.92 4.25 3.96 4.27 4.51	0.24 0.21 0.21 0.18 0.18	3.59 3.44 3.73 3.47 3.75 3.95	98.14 98.35 98.56 98.74 98.92 99.10	49.65 53.09 56.82 60.29 64.04 67.99
1271 1304 1337 1370 1403 1436 1469	10 9 13 9 10 13 3	2538 2580 3349 2091 3249 3670 980	2.62 2.88 4.03 2.71 4.52 5.48 1.57	0.09 0.09 0.12 0.08 0.12 0.13	2.30 2.52 3.54 2.38 3.97 4.81 1.38	99.19 99.28 99.41 99.48 99.60 99.74 99.77	70.29 72.81 76.35 78.73 82.70 87.51 88.89
1502 1535 1568 1601 1634 1667 1700	1 2 5 2 4 1	454 1105 1756 654 1307 610 302	0.78 2.02 3.43 1.36 2.89 1.43 0.75	0.02 0.04 0.04 0.02 0.05 0.05	0.68 1.77 3.01 1.19 2.54 1.26	99.79 99.83 99.89 .99.92 99.97 99.97	89.57 91.34 94.35 95.54 98.08 99.34 100.00

TOTAL 1.18E+04 2.73E+06 113.95

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 11816/ 13463 = 87.8%

NUMBER MEAN DIA.= D_{10} 199.15 μ m VOLUME MEAN DIA.= D_{30} 430.63 μ m SAUTER MEAN DIA.= D_{32} 810.47 μ m

```
Nozzle RD10 (D10-45)
Angle to Airstream 0 degrees
Spray Pressure 30 psi
Airspeed 50 mph
                                                               Slice Rate
                                                                                           1.5 MHz
                                                               AVG
                                                                                            100
                                                               DEM
                                                                                           1 cm.
                                                               RAR
                                                                                            1 5
                                .94 gpm
10% SIM. VELPAR
                                                                Distance to Probe 46 cm.
 Flow Rate
 Tank Mix
                                                                Sample Interval
                                                                                            240 sec.
                                90% WATER
                                                               Number of Samples 1
                                                               Number of Scans
                                                               Number 5. Scan Spacing 6 cm. 40 cm.
 FILE: C:\PMS\DATA\073186.002
 Number of Tests Combined: 2
                                                              Scan Length
                                                                                        ACCUMULATED
 LIPPER
           N(RAW)
                               N/SEC
                                            Gm/SEC % N % VOL. % N % VOL.
 LIMIT
                                        Gm/SEC

0.19 50.30 0.10
0.27 11.93 0.14
0.63 9.24 0.33
1.09 7.08 0.57
1.30 4.45 0.68
1.53 3.09 0.79
1.72 2.23 0.89
2.04 1.80 1.06
2.43 1.50 1.26
2.43 1.50 1.26
2.61 1.18 1.35
2.96 1.03 1.54
2.83 0.76 1.47
3.86 0.82 2.00
2 3.50 0.60 1.82
3.26 0.45 1.69
3.12 0.36 1.62
  56 1167 5.60ETUB
89 2061 1.35E+06
122 2097 1.04E+06
154 1787 799369
                                                                                  50.30
    56
                1167
                         5.68E+06
                                                                                                  0.10
                                                                                   62.23
                                                                                                0.24
                                                                                  71.48
78.56
                                                                                                   0.57
                           799369
502955
                                                                                                   1.13
              1180
   187
                                                                                    83.01
                                                                                                   1.81
   220
                 880
                                349427
                                                                                     86.11
                                                                                                   2.60
                            252216
203262
168881
133420
115973
   252
                  632
                                                                                     88.34
                                                                                                   3.49
   284
                  524
                                                                                     90.14
                                                                                                    4.55
                 457
                                                                                     91.64
                                                                                                   5.82
   318
   351
382
                  386
                                                                                     92.82
                                                                                                   7.17
382
414
447
479
512
545
578
611
644
677
710
743
776
809
842
875
908
842
875
908
1007
1040
1073
11040
1139
1172
1205
1238
1271
1304
1337
1370
1403
14369
1502
1535
1568
                  345
                                                                                     93.84
                                                                                                   8.71
                              86014
                  269
                                                                                     94.61
                                                                                                  10.18
                                                                                     95.43
                  270
                                 92555
                                                                                                  12.18
                  220
                                67502
                                                                                     96.02
                                                                                                  14.00
                                51371
                                                                                     96.48
                  182
                                                                                                  15.69
                                                                                      96.84
                                                                                                  17.31
                  150
                                 40473
                                                                     1.62
1.68
1.74
1.64
                                                             0.31
                 113
                                35076
                                                 3.24
                                                                                     97.15
                                                                                                  18.99
                                 30582
                  102
                                                 3.35
                                                                                     97.42
                                                                                                  20.73
                                24574
                    93
                                                 3.17
                                                             0.22
                                                                                     97.64
                                                                                                  22.38
                 88
59
63
59
                               24237
22653
                                                             0.21 1.89
0.20 2.05
0.16 1.88
0.17 2.22
0.11 1.66
0.11 1.95
0.15 2.90
                                                 3.64
                                                                                      97.85
                                                                                                  24.27
                                                                                                  26.32
                                                 3.94
                                                                                      98.05
                                18140
18737
                                                3.63
                                                                                     98.21
                                                                                                  28.20
```

4.28

3.75

4.75

4.02 5.22 6.85 5.76 6.14

6.62 5.21

5.35

4.49

5.21

2.40

6.85

3.20

5.58

12317

12780 16884

12837

8962 6468 6101 4718 2326

8064 2990 2568

98.38

98.49

98.60

98.75

98.86

98.95

99.03

99.12

99.23

99.31

99.39

99.47

99.58

99.62 99.64

99.71

99.74

99.76

99.53

2.47

2.09

0.11 3.56 0.08 2.99 0.08 3.19

0.08 3.44

0.06 0.06 0.05 0.04

0.07

0.03

0.02

2.11

2.71

2.71

2.78

2.33

1.25

1.87

1.73

4.67

0.11 0.09

0.08

0.09

30.43

32.09

34.04

36.93

39.40

41.50

43.59

46.30

49.86

52.85

54.04

59.47

62.18

64.96

67.29

68.54

73.20

75.07

76.80

2.40 8.99 3.60 3.33 7.57 8.29 7.12 2.20 6.88 6.46 5436 5545 4445 0.05 3.93 99.81 80.73 13 99.86 0.05 4.30 11 85.03 8 0.04 3.69 99.90 88.73 1286 0.01 99.91 89.87 1.14 7 5 4 376D 99.95 0.03 3.57 93.44 5 3309 0.03 3.35 99.97 96.79 . 2233 99.20 99.99 2.41 1601 4.64 0.02 99.20 0.00 99.99 1634 0 0 0.00 0.00 1667 0.00 0.00 0.00 99.99 99.20 1700 1.54 0.01 0.80 100.00 100.00 616 TOTAL 1.37E+04 1.13E+07 192.60

TOTAL ACCEPTED RAW PARTICLES / TOTAL IMAGES = 13707/ 16488 = 83.1%

NUMBER MEAN DIA.= D10.... 125.11 µm VOLUME MEAN DIA.= D30.... 319.49 µm SAUTER MEAN DIA.= D32.... 724.48 µm

42

38 48

28 31 37

24 30

30

17

16

11

6

15

50 33

NUMBER MEDIAN DIA.=0 N .1... <56 µm N .56 N .0 N .9... 282.23 µm

VOLUME MEDIAN DIA.=DV.5...1041.06 um DV.9...1502.71 um

RELATIVE SPAN= 1.05

O degrees
30 ps:
50 mph
.74 ppm
WATER Angle to Airstream Spray Pressure Airspeed Fiow Rate

Slice Rate 1.5 MHz AVG 100 DEM 1 cm. BAR Distance to Probe 31 cm. Sample interval 240 sec. Number of Samples 1 Number of Scans Scan Spacing 6 cm. 40 cm. Scan Length

FILE: C:\PMS\DATA\05308611.002 Number of Tests Combined: 3

UPPER						ACCUI	MULATED
LIMIT	N(RAW)	N/SEC	Gm/SEC	% N	% VOL.	% N	% VOL.
	, , , , , , , , , , , , , , , , , , , ,	525	C / D.C.		,, vol.		W 102.
56	951	649763	0.02	34.57	0.03	34.57	0.03
89	2:12	193990	0.04	10.32	0.05	44.89	0.03
:22	2395	182127	0.11	9.69	0.14	54.58	0.21
154	2272	176258	0.24	9.38	0.30	63.96	0.21
187	1467	118311	0.31	6.29	0.38		0.51
						70.25	
220	1073 807	98481 63804	0.39	4.71	0.48	74.96	1.36
252			0.43	3.39	3.53	78.35	1.89
284	607	47131	0.47	2.51	0.58	80.66	2.47
318	599	45882	0.66	2.44	0.81	83.30	3.28
351	461	34997	0.68	1.86	0.84	85.16	4.12
382	485	31016	0.79	1.65	0.97	86.81	5.10
414	367	27796	0.92	1.48	1.12	88.29	6.22
447	327	24471	1.02	1.30	1.25	89.59	7.47
479	263	20108	1.04	1.07	1.28	90.66	8.75
512	247	19239	1.22	1.02	1.50	91.69	10.25
545	226	16976	1.31	0.90	1.61	92.59	11.86
578	169	12181	1.12	2.64	1.37	93.23	13.23
611	159	12086	1.32	0.64	1.63	93.88	14.86
644	126	9457	1.21	3.55	1.49	94.38	16.35
677	128	10242	1.54	0.54	1.89	94.92	18.24
710	82	6380	1.11	0.34	1 . 36	95.26	19.60
743	84	6612	1.32	0.35	1.63	95.61	21.23
776	70	5608	1.28	3.30	1.58	95.91	22.81
809	77	6303	1.64	0.34	2.01	96.25	24.62
842	63	4988	1.46	5.27	1.80	96.51	26.62
575	59	4967	1.64	5.26	2.52	96.7E	28.63
728	51	4338	1.60	5.23	1.97	97.31	30.60
941	34	2956	1.22	0.16	1.50	97.17	32.10
974	45	4453	2.04	5.24	2.51	97.40	34.60
1537	49	4240	2.15	0.23	2.64	97.63	37.25
1545	37	3565	2.00	5.19	2.45	97.82	39.70
:573	34	3210	1.98	0.17	2.43	97.99	42.13
1:16	46	4638	3.13	3.25	3.85	98.24	45.97
1:37	37	3665	2.71	2.19	3.33	98.43	47.30
1172	39	4162	3.35	0.22	4.12	98.65	53.42
1235	27	2952	2.59	5.16	3.18	98.81	56.60
:238	27	3033	2.89	€.16	3.55	98.97	60.15
1271	23	2769	2.86	0.15	3.51	99.12	63.65
1354	15	2267	2.53	5.12	3.11	99.24	66.76
1337	:7	2435	2.93	5.13	3.60	99.37	70.36
1370	:3	1534	1.99	0.38	2.44	99.45	72.80
1403	18	1373	1.91	3.27	2.35	99.52	75.14
1436	13	1865	2.79	2.15	3.42	99.62	78.57
:469	4	502	0.80	5.03	3.99	99.65	79.56
1502	5	859	1.47	2.25	1.81	99.69	81.36
1535	7	1:24	2.06	5.56	2.53	99.75	83.89
1565		538	1.05	0.03	1.29	99.78	85.18
1601	1	:39	3.29	5.51	0.36	99.79	85.53
1434	3	19:	0.42	0.21	0.52	99.80	84.05
1567	2	473	1.11	د ـ . ـ خ	1.37	99.82	67.42
1755	-	302	0.75	0.22	5.92	99.84	85.34
1733	:	374	3.99	5.52	1.22	79.86	89.56
1766	÷	3,5	0.00	8.83	2.00	99.86	89.56
1799	<u> </u>	367	1.39	3.52	:.33	99.88	90.89
1532	i	586	1.83	0.23	2.25	99.91	93.14
1865	ż	1572	3.60	0.06	4.42	99.97	97.56
1278	ī	571	1.99	0.23	2.44	100.00	100.00
,.	•	J. 1	, ,				

TOTAL 1.61E+04 1.88E+06 81.42

TOTAL ACCEPTED RAW FARTICLES / TOTAL IMAGES = 16149/ 18096 = 89.2%

NUMBER MEDIAN DIA.=0 $\stackrel{\text{CN}}{\text{N.5}}$. . . 106.34 um $\stackrel{\text{CN}}{\text{CN}}$. . . 459.31 $\stackrel{\text{Lm}}{\text{CN}}$

VOLUME MEDIAN DIA. = DV 1 ... 506.70 -m DV 1 ... 1144.11 3m DV 9 ... 1776.46 um

RELATIVE SPAN= 1.11

DTG 84/02/15 08:52:00

DFM=1.0--1.5 MHZ

UPPER	. (0	W 18.00	am (2.80	u 11	* 401		1ÚLATED
LIMIT	to (RAW)	ŭ⊼ãēc	dw/3EC	7 - 7	* AOF.	7 7	7 AOF
56	1314	1.33E 06	0.04	29.19	U.04	29.19	0.04
89	3708	468224	0.09	10.29	0.08	39.48	0.12
122	5099	552784	0.34	12.15	0.28	51.62	0.40
154	5144	597204	0.82	13.12	0.69	64.74	1.09
187	3572	371657	U.96	8.17	0.81	72.91	1.90
219	2437	254873	1.11	5.60	0.94	78.51	2.83
252	1890	187844	1,28	4.13	1.08	82.64	3.91
284	1404	135460	1.36	2.98	1.15	85.61	5.06
318	1060	96719	1.39	2.13	1.17	87.74	6.23
351	905	79756	1.56	1.75	1.31	89.49	7.54
382	713	63570	1.62	1.40	1.37	90.89	8.91
414	576	52719	1.74	1.16	1.46	92.05	10.37
447	495	45320	1.89	1.00	1.59	93.04	11.96
479	396	35801	1.86	0.79	1.56	93.83	13.52
512	344	30 721	1.95	0.67	1.64	94.50	15.16
545	294	266 30	2.05	0.59	1.73	95.09	16.89
578	229	24223	2.24	0.53	1.88	95.62	18.77
611	217	20 36 7	2.23	0.45	1.88	96.07	20.65
644	184	16119	2.08	0.35	1.75	96.42	22.40
677	137	12467	1.87	0.27	1.58	96.70	23.98
710	122	13346	2.32	0.29	1.96	96.99	25.93
743	101	15282	3.06	0.34	2.57	97.32	28.51
776	107	10116	2.31	0.22	1.95	97.55	30.45
809	90	8857	2.30	0.19	1.94	97.74	32.39
842	73	10608	3.12	0.23	2,62	97.97	35.01
875	93	9432	3.12	0.21	2.62	98.18	37.64
908	79	7435	2.75	0.16	2.32	98.35	39.95
941	64	6672	2.75	0.15	2.32	98.49	42.27
974	56	5696	2.61	0.13	2.20	98.62	44.47
1007	60	5414	2.75	0.12	2.31	98.74	46.78
1040	46	8849	4.95	0.19	4.17	98.93	50.95
1073	42	4542	2.80	0.10	2.35	99.03	53.31
1106	46	4489	3.03	0.10	2.55	99.13	55.86
1139	37	6626	4.89	0.15	4.12	99.27	69.98
1172	26	3015	2.43	0.07	2.04	99.34	62.02
1205	29	6 3 9 7	5.61	0.14	4.72	99.48	66.74
1238	21	3252	3.10	0.07	2.61	99.55	69.35
1271	17	2413	2.49	0.05	2.10	99.61	71.45
1304	12	1752	1.95	0.04	1.64	99.64	73.09
1337	8 10	1008	1.21	0.02	1.02	99.67	74.11
1403	10	1617	2.09	0.04	1.76	99.70	75.87
	8	1809	2.52	0.04	2.12	99.74	77.99
1436	6	1358	2.03	0.03	1.71	99.77	79.70
1502	9	868	1.39	0.02	1.17	99.79 99.83	80.87
	3	1878		0.04	2.71		83.58
1535	3 7	403	0.74	0.01	0.62	99.84	84.20
1568		1224	2.39	0.03	2.01	99.87	86.21
1601	3	1028	2.14	0.02	1.80	99.89	88.01
1634	1	407	0.90	0.01	0.76	99.90	88.77

RD-10,0 Degrees,40 psi,50 mph

DTG 84/02/15 08:52:00

DFM=1.0--1.5 MHz

UPPER						A CCU	AULATED
LIMIT	MIRAMI	MYSEC	9m/SEC	# W	NOL.	N N	VOL.
1667	3	567	1.33	0.01	1.12	99.91	89.89
1700	1	290	0.72	0.01	0.61	99.92	90.50
1733	2	611	1.61	0.01	1.36	99.93	91.86
1766	1	247	0.69	0.01	0.58	99.94	92.44
1799	2	1121	3.32	0.02	2.79	99.96	95.23
1832	2	1251	3.91	0.03	3.29	99.99	98.52
1865	0	0	0.00	0.00	0.00	99.99	98.52
1898	1	504	1.75	0.01	1.48	100.00	100.00
1931	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		4.55E 06	118.80				

TOTAL RAW PARTICLES.... 31322/34264-- 91.41%

NUMBER MEAN DIAMETER... 171.16 MICROMETERS S.D.... 196.51

VOLUME MEAN DIAMETER... 168.18 MICROMETERS S.D.... 659.33

SAUTER MEAN DIAMETER... 734.90 MICROMETERS

 $D_{N0,1},\dots$ 0.00 MICROMETERS $D_{V0,1},\dots$ 406.69 MICROMETERS $D_{V0,5},\dots$ 117.53 MICROMETERS $D_{V0,5},\dots$ 1031.98 MICROMETERS

DNO.9... 362.98 MICROMETERS DVO.9...1672.57 MICHOMETERS

R.S.... 1.23

DPM=1.0--1.5 MHz

UPPER	N/DAW1	N/CEC	/556	8 . A7	1 UOT		ULATED
LIMIT	N(RAW)	MZSEC	qm/SEC	<u>N</u>	YOL.	<u> </u>	YOL.
56	1141	1.67E 06	0.05	34.28	0.07	34.28	0.07
89	2824	546218	0.11	11.21	C.14	45.49	0.21
122	3393	552422	0.34	11.34	0.42	56.84	0.63
154	3376	561143	0.77	11.52	0.96	68.36	1.59
187	2311 1622	380920	0.99 1.16	7.82	1.24	76.18	2.83
219 252	1035	266124 171860	1.15	5.46 3.53	1.46	81.64	4.29
284	807	134078	1.35	2.75	1.69	85.17 87.92	5.75 7.44
318	578	101437	1.46	2.08	1.83	90.01	9.27
351	438	69505	1.36	1.43	1.71	91.43	10.98
382	387	66390	1.70	1.36	2.13	92.80	13.11
414	303	49958	1.64	1.03	2.06	93.82	15.17
447	227	37614	1.57	0.77	1.97	94.60	17.14
479	207	34519	1.79	0.71	2.25	95.30	19.38
512	177	2730 0	1.74	0.56	2.18	95.86	21.56
545	145	22978	1.77	0.47	2.22	96.34	23.78
578	120	18463	1.70	0.38	2.14	96.72	25.92
611	116	19677	2.16	0.40	2.71	97.12	28.62
644	98	15608	2.01	0.32	2.52	97.44	31.15
677	109	17389	2.61	0.36	3.28	97.80	34.43
710	72	10735	1.87	0.22	2.34	98.02	36.77
743	69	12745	2.55	0.26	3.20	98.28	39.97
776 809	6 2 5 2	10525 8506	2.41	0.22 0.17	3.02 2.77	98.49 98.67	42.99 45.76
842	41	8054	2.21	0.17	2.97	98.83	48.73
875	35	6708	2.22	0.14	2.78	98.97	51.51
908	36	7734	2.86	0.16	3.59	99.13	55.10
941	26	4280	1.77	0.09	2.22	99.22	57.31
974	19	4053	1.86	0.08	2.33	99.30	59.64
1007	16	2727	1.38	0.06	1.74	99.36	61.38
1040	2:2	5844	3.27	0.12	4.11	99.48	65.48
1073	13	2209	1.36	0.05	1.71	99.52	67.19
1106	5	1165	0.79	0.02	0.99	99.55	68.18
1139	12	2573	1.90	0.05	2.38	99.60	70.56
1172	11	2800	2.26	0.06	2.83	99.66	73.39
1205	10	3163	2.77	0.06	3.48	99.72	76.87
1238	6	1205	1.15	0.02	1.44	99.75	78.31
1271	7 7	1231	1.27 3.50	0.03	1.59	99.77	79.90
1304 1337	3	3140 1477	1.78	0.06	4.39 2.23	99.84 99.87	84.30 86.52
1370	9	1964	2.54	0.03	3.19	99.91	89.72
1403	2	286	0.40	0.01	0.50	99.91	90.22
1436	4	1455	2.17	0.03	2.73	99.94	92.94
1469	ĩ	371	0.59	0.01	0.74	99.95	93.69
1502	ī	744	1.27	0.02	1.60	99.97	95.29
1535	ō	0	0.00	0.00	0.00	99.97	95.29
1568	1	144	0.28	0.00	0.35	99.97	95.64
1601	Ō	0	0.00	0.00	0.00	99.97	95.64
1634	0	0	0.00	0.00	0.00	99.97	95.64

RD-10,90 Degrees,40 psi,50 mph

DTG 84/02/15 16:14:00

DPM=1.0--1.5 MHz

UPPER						ACCU	AULATED
LIMIT	N (RAW)	N/SEC	qm/SEC	N	NOL.	<u> </u>	NOL.
1667	1	1480	3.48	0.03	4.36	100.00	100.00
1700	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		4.87E 06	79.71				

TOTAL RAW PARTICLES.... 19957/22481-- 88.77%

NUMBER MEAN DIAMETER... 150.88 MICROMETERS S.D.... 167.66

VOLUME MEAN DIAMETER... 315.13 MICROMETERS S.D.... 564.90

SAUTER MEAN DIAMETER... 615.13 MICROMETERS

 DN 0.1...
 0.00 MICROMETERS
 DV 0.1...
 332.34 MICROMETERS

 DN 0.5...
 10 Z.04 MICROMETERS
 DV 0.5...
 856.59 MICROMETERS
 R.S....
 1.23

 DN 0.9...
 317.19 MICROMETERS
 DV 0.9...
 1388.27 MICROMETERS

RD-10(D14-45), 0 degrees, 40 psi, 100 mph, 1.53 gpm, Water D'TG 84/02/14 11:03:00

DFM=1.0--3.0 MHz

UPPER						ACCUI	IULATED
LIMIT	N (RAN)	N/SEC	qm/SEC	8 11	& VOL.	i N	%_VOL.
53	947	6.49E U6	0.21	35.58	0.20	35.58	0.20
89	2009	2.152 06	0.43	11.80	0.41	47.37	0.61
122	2381	2.16E 06	1.31	11.87	1.25	59.24	1.86
154	2356	2.06E 06	2.82	11.30	2.69	70.53	4.55
187	2023	1.522 06	3.93	8.33	3.75	78.86	8.30
219	1501	997504	4.36	5.47	4.16	84.33	12.46
252	1369	658379	4.49	3.51	4.28	87.94	16.74
284	1288	548927	5.51	3.01	5.26	90.95	21.99
318	1052	377946	5.43	2.07	5.18	93.03	27.17
351	855	296921	5.81	1.63	5.54	94.65	32.71
382	657	204045	5.21	1.12	4.97	95.77	37.68
414	54v	109043	5.57	0.93	5.31	93.70	42.99
447	405	107323	4.47	0.59	4.27	97.29	47.26
479	364	85354	4.43	0.47	4.22	97.76	51.48
512	315	93665	5.64	0.49	5.37	98.24	56.35
545	217	61632	4.74	0.34	4.52	98.58	61.37
5 7 8	202	66181	6.11	0.36	5.83	98.94	57.20
611	138	36644	4.02	0.20	3.83	99.15	71.03
644	119	47770	6.16	0.26	5.87	99.41	76.90
677	76	32177	4.84	0.18	4.61	99.58	81.52
710	62	24372	4.24	0.13	4.05	99.72	85.56
743	34	12473	2.50	0.07	2.38	99.79	87.94
776	26	7380	1.69	0.04	1.61	99.83	89.55
809	19	7254	1.89	0.04	1.80	99.87	91.35
842	16	7168	2.11	0.04	2.01	99.91	93.36
875	1	282	0.09	0.00	0.09	99.91	93.45
908	4	8697	3.22	0.05	3.07	99.95	96.52
941	3	6832	2.82	0.04	2.69	99.99	99.21
974	3	479	0.22	0.00	0.21	99.99	99.41
1007	0	0	0.00	0.00	0.00	99.99	99.41
1040	U	0	0.00	0.00	0.00	99.99	99.41
1073	1	997	0.61	0.01	0.59	100.00	100.00
1105	0	0	0.00	0.00	0.00	100.00	100.00
CLATCL		1.820 07	104.87				

TOTAL RAW PARTICLES.... 19083/22532-- 84.69%

NUMBER MEAN DIAMETER... 130.23 MICROMETERS S.D.... 116.64

VOLUME MEAN DIAMETER... 222.37 MICROMETERS S.D.... 350.74

SAUTER MEAN DIAMETER... 359.78 MICROMETERS

Reference #4

KD-10(D14-45), 30 degrees, 40 psi, 100 mpii, 1.35 gpm, water

DTG 84/02/15 14:18:00

DFM=1.0--3.0 MHz

UPPER	PER ACCUMULATED								
LIMIT	N (RAW)	M/SEC	qm/SEC	8 N	%_VOL.	8 N	%_VOL.		
56	991	1.03E 07	0.34	39.26	0.46	39.26	0.46		
89	2161	3.66E 06	0.73	13.91	0.98	53.17	1.44		
122	2417	3.45E 06	2.10	13.12	2.82	66.28	4.25		
154	2080	2.76E 06	3.78	10.49	5.08	76.77	9.33		
187	1585	2.00E 06	5.17	7.58	6.95	84.35	16.27		
219	1196	1.22E 06	5.32	4.63	7.16	88.98	23.43		
252	947	771668	5.26	2.93	7.07	91.91	30.50		
284	936	695981	6.99	2.64	9.40	94.55	39.89		
318	876	515661	7.41	1.96	9.96	96.51	49.85		
351	506	332063	6.50	1.26	8.73	97.77	58.59		
382	295	174904	4.47	0.66	6.00	98.43	64.59		
414	191	120501	3.97	0.46	5.33	98.89	69.92		
447	105	103697	4.32	0.39	5.81	99.29	75.73		
479	82	5 26 7 8	2.73	0.20	3.67	99.49	79.40		
512	42	38791	2.47	0.15	3.31	99.63	82.71		
545	25	28418	· 2.19	0.11	2.94	99.74	85.65		
578	27	29133	2.69	0.11	3.62	99.85	89.27		
611	11	10417	1.14	0.04	1.53	99.89	90.80		
644	8	16 20 2	2.09	0.06	2.81	99.95	93.61		
677 710	5	5117	0.77	0.02	1.03	99.97	94.65 94.68		
743	1 3	168 2127	0.03 0.43	0.00 0.01	0.04 0.57	99.97 99.98	95.26		
776	1	337	0.43	0.01	0.10	99.98	95.36		
809	0	0	0.00	0.00	0.00	99.98	95.36		
842	0	0	0.00	0.00	0.00	99.98	95.36		
875	0	ŏ	0.00	0.00	0.00	99.98	95.36		
908	0	ŏ	0.00	0.00	0.00	99.98	95.36		
941	Ö	ŏ	0.00	0.00	0.00	99.98	95.36		
974	Ü	Ŏ	0.00	0.00	0.00	99.98	95.36		
1007	0	0	0.00	0.00	0.00	99.98	95.36		
1040	0	0	0.00	0.00	0.00	99.98	95.36		
1073	0	0	0.00	0.00	0.00	99.98	95.36		
1106	o	0	0.00	0.00	0.00	99.98	95.36		
1139	1	4673	3.45	0.02	4.64	100.00	100.00		
1172	0	0	0.00	0.00	0.00	100.00	100.00		
TOTALS		2.63E 07	74 41)						
1011120		2.032 07	74.10						
TOTAL F	RAW PARTI	CLES	14492/1726	5 83.9	948				
NUMBER MEAN DIAMETER 110.14 MICROMETERS S.D 89.45									
VOLUME MEAN DIAMETER 175.48 MICROMETERS S.D 292.18									
SAUTER MEAN DIAMETER 268.39 MICROMETERS									
DNO.1 0.00 MICROMETERS DVO.1 157.46 MICROMETERS									

D_{N0.5}... 81.75 MICROMETERS

D_{NO.9}... 230.99 MICROMETERS

D_{V0.5}... 318.84 MICROMETERS R.S.... 1.37

DV0.9... 593.20 MICROMETERS

Reference #4

RD-10(D14-45), 0 degrees, 40 psi, 150 mph, 1.53 gpm, Water DTG 84/02/14 11:32:00

DFM=1.0--4.0 MHz

UPPER						ACCU!	MULATED
LIMIT	N(RAW)	NZSEC	qm/SEC	8 11	% VOL.	<u>8 N</u>	% VOL.
56	821	7.33E 06	0.24	30.50	0.39	30.50	0.39
89	2966	3.35E 06	0.67	13.94	1.08	44.44	1.47
122	4188	3.70E 06	2.25	15.38	3.64	59.82	5.11
154	4309	3.15E 06	4.31	13.11	6.99	72.94	12.10
187	4336	2.40E 06	6.20	9.97	10.06	82.90	22.16
219	4111	1.60E 06	7.00	6.66	11.35	89.56	33.51
252	3057	990910	6.75	4.12	10.95	93.68	44.46
284	1738	544012	5.46	2.26	8.86	95.95	53.32
318	1001	337206	4.85	1.40	7.86	97.35	61.18
351	600	234240	4.58	0.97	7.43	98.32	68.61
382	357	149235	3.81	0.62	6.18	98.94	74.78
414	173	58084	1.91	0.24	3.10	99.19	77.89
447	123	64463	2.69	0.27	4.36	99.45	82.24
479	57	6 26 85	3.25	0.26	5.27	99.71	87.51
512	25	19939	1.27	0.08	2.05	99.80	89.57
545	14	5247	0.40	0.02	0.65	99.82	90.22
578	9	18607	1.72	0.08	2.79	99.90	93.01
611	2	663	0.07	0.00	0.12	99.90	93.12
644	1 2	36	0.00	0.00	0.01	99.90	93.13
677	2	9592	1.44	0.04	2.34	99.94	95.47
710	1	5054	0.88	0.02	1.43	99.96	96.90
743	1	9561	1.91	0.04	3.10	100.00	100.00
776	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		2.40E 07	61.67				

TOTAL RAW PARTICLES.... 27892/33762-- 82.61%

NUMBER MEAN DIAMETER... 117.48 MICROMETERS S.D.... 82.35

VOLUME MEAN DIAMETER... 169.91 MICROMETERS S.D.... 250.60

SAUTER MEAN DIAMETER... 238.34 MICROMETERS

 $D_{N0.1}...$ 0.00 MICROMETERS $D_{V0.1}...$ 144.68 MICROMETERS $D_{V0.5}...$ 272.44 MICROMETERS $D_{V0.5}...$ 272.44 MICROMETERS $D_{V0.9}...$ 533.69 MICROMETERS

RD-10(D14-45), 90 degrees, 40 psi, 150 mph, 1.53 gpm, Water
DTG 84/02/15 14:31:00

DFM=1.0--4.0 MHz

UPPER					ACCUMULATED		
LIMIT	N (RAW)	N/SEC	qm/SEC	<u>₹</u> _ <u>N</u>	%_VCL.	8 N	₹ VOL.
56	577	1.37E 07	0.45	35.3 7	1.06	35.3 7	1.06
89	2175	6.54E 06	1.30	16.85	3.06	52.22	4.12
122	3130	7.19E 06	4.36	18.50	10.25	70.72	14.37
154	3388	5.00E 06	6.84	12.87	16.07	83.59	30.44
187	2511	2.88E 06	7.45	7.41	17.51	91.00	47.95
219	1795	2.06E 06	8.99	5.29	21.12	96.29	69.06
252	86 7	976016	6.65	2.51	15.62	98.81	84.69
284	241	280049	2.81	0.72	6.61	99.53	91.29
318	70	97824	1.41	0.25	3.30	99.78	94.60
351	19	41362	0.81	0.11	1.90	99.89	96.50
382	7	11329	0.29	0.03	0.68	99.92	97.18
414	6	19908	0.66	0.05	1.54	99.97	98.72
447	4	11461	0.48	0.03	1.12	100.00	99.84
479	1	1308	0.07	0.00	0.16	100.00	100.00
512	0	0	0.00	0.00	0.00	100.00	100.00
TOTALS		3.88E 07	42.57				

TOTAL RAW PARTICLES.... 14791/17972-- 82.30%

NUMBER MEAN DIAMETER... 96.23 MICROMETERS S.D.... 58.66

VOLUME MEAN DIAMETER... 127.96 MICROMETERS S.D.... 161.17

SAUTER MEAN DIAMETER... 164.96 MICROMETERS

D_{N0.1}... 0.00 MICROMETERS D_{V0.1}... 107.87 MICROMETERS D_{V0.5}... 190.15 MICROMETERS D_{V0.9}... 182.81 MICROMETERS D_{V0.9}... 278.33 MICROMETERS

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Glossary

% N

The percentage of the total number of droplets (N/sec) in the entire distribution which fall into this category.

% Vol

Percentage of the volume of the distribution contained in droplets within this category.

Accumulated % N

Sum of the % N column for this category and all categories smaller.

Accumulated % Vol.

Sum of the % Volumne column for this category and all categories smaller.

Airspeed

Mean speed of the air moving through the wind tunnel.

Angle to Airstream

Angle between centerline of atomizer and direction of airflow (0 degrees = coincident, 90 degrees = perpendicular with centerline of atomizer pointing vertically downward, 180 degrees = opposite).

AVG

The number of droplets to categorize between executions of the averaging routine by the droplet categorization system. This is done to scale measured droplets according to the density of the spray cloud during the time required to measure each droplet.

BAR

Bulk Area Ratio. The limit set by the droplet categorization system for acceptance of a droplet. Bulk area ratio is the ratio of length x width of the image of a droplet to the projected area of the same droplet as computed by the formula Pi x r squared. Images with a BAR above the noted value are rejected.

DFM

Depth of Field (Mechanical). The physical length of the laser beam exposed to the spray cloud.

Distance to Probe

The physical distance between two parallel planes, one passing through the average emission point of the atomizer and the other passing through the centerline of the laser beam exposed to the spray cloud.

D_{V.1} Diameter that contains 10% of volume in drops of smaller size. D_{V.5} Diameter that contains 50% of the volume in drops of smaller size. Also defined as Volume Median Diameter. D_{V.9} Diameter that contains 90% of the volume in drops of smaller size. $D_{V.9} - D_{V.1}$ The range in drop size that contains 80% of the spray volume. Flow Rate Liquid flow rate through the atomizer. Gm/sec Mass represented by the N/second column assuming spherical droplets of unit density. N(Raw) The number of droplets measured by the system that fell within that category. N/sec The number of droplets in that category passing the sample point per second during the test. This uses the scaled counts obtained using the procedure explained under AVG above. Neat Undiluted tank mix. Nozzle Atomizer under study. Number Mean Diameter Average diameter of all droplets in the distribution. Number of Samples data collection period. Total time of data collection equals number of samples x sample interval.

The number of sample intervals used for the entire

Number of Sample Rings Used only for rotary atomizers. This is the number of concentric rings, each represented by a point sample, which comprise the pattern produced by the atomizer.

Number of Scans For a hydraulic nozzle, the distribution is collected by moving the nozzle in a rectangular pattern, starting in one corner of a rectangle which encloses the entire emitted pattern. The nozzle moves alternately up or down so that the liquid spray cloud passes by the probe. The number of scans is the number of times the nozzle is moved up or down in constructing the entire pattern (See Scan Spacing and Scan Length).

Number of Tests Combined

Under some circumstances, more than one test is used to represent the distribution from an atomizer. The additional tests can either be summed (if each represents only a portion of the entire pattern), or averaged.

Relative Span

 $^{D}_{V}$ $_{0}$ $^{-D}_{V}$ $_{1}$ 1 1 $^{D}_{V}$ $_{5}$ Index that indicates the relative uniformity of drop spectra. The number represents a normalized value of the range as a fraction of the volume median diameter. Thus, a smaller number indicates a smaller relative range and a more uniform drop spectra.

Representative Statistics

The following statistics conform to ASTM notation for summary statistics of a droplet or particle size distribution. In the following formula, N is the number of droplets in the category i, and D is a representative diameter of the category. For all categories, the representative diameter was taken to be a droplet of average volume for the category.

The general formula is D_(pq) = (Sum(N_i)*(D_{i p}))/(Sum(N_i)*(D_{i q}))

Sample Interval

An internal setting of the droplet categorization equipment for the frequency of a forced execution of the averaging routines.

Sauter Mean Diameter

Diameter whose ratio of volume to surface area is the same as that of the entire spray.

Scan Length

The length of each of the vertical scans.

Scan Spacing

The distance between successive vertical scans of the pattern. The test begins at one side of the pattern and moves by an interval equal to scan spacing between vertical scans until the other side of the pattern is reached.

Slice Rate

Frequency of sampling by the droplet categorization system.

Spray Pressure

Pressure on the liquid at the atomizer.

Tank Mix

The liquid being atomized.

Total Accepted Raw Particles Number of all droplets that were measured and were accepted by the sytem.

Total Images

All droplets measured. Includes those rejected because they were out of focus or not contained entirely within the laser beam.

Upper Limit

The diameter in micrometers of the upper limit of each of the droplet size categories. This value is determined by the hardware and optics of the unit.

Volume Mean Diameter

Average volume of all droplets in the distribution.

Volume Median Diameter

See $D_{V.5}$ above.



